Best practices for improving law compliance in the forestry sector

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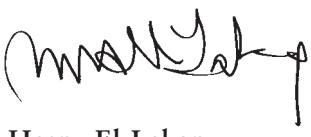
Foreword

Forest law enforcement is one of the most debated issues in the international forestry arena today. Illegal forest production dwarfs legal production in some countries. Illegal land clearance gives rise to severe problems with deforestation and forest fires. And illegal trade tars all forest products from some regions with a negative image. Urgent action is required to stop forest crime. This publication aims to facilitate the shift from discussing such problems towards devising and implementing solutions.

FAO and ITTO have formed a partnership to promote best practices in forest law compliance. Both organizations have long-running programmes to promote sustainable forest management, and both carry out specific activities addressing forest law enforcement to this end. While tropical countries have often been the focus of attention, it is increasingly clear that most countries have problems ensuring compliance with forest laws, although they differ in their capacity to address the challenges. This book is produced to publicize current steps being taken on the national and international levels to deal with forest crime, to help build capacity through the sharing of experiences.

FAO and ITTO are planning a series of regional workshops beginning in 2006 to contribute to strengthening the dialogue among countries, sharing experiences and developing appropriate strategies and measures to improve forest law compliance. These workshops will also be an opportunity to update and improve on the best practices included here, since new developments occur almost daily in this fast-moving field.

Many of the guidelines, best practices and codes of practice promulgated by FAO and ITTO already form the basis for forest legislation and policy in a number of countries. We recommend these *Best practices for improving law compliance in the forest sector* to all those involved in combating forest crime, and hope that they will be implemented with a similar degree of success.



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Acronyms

AFLEG	African Forest Law Enforcement and Governance
CCICED	China Council for International Cooperation on Environment and Development
CEPI	Confederation of European Paper Industries
CIEL	Center for International and Environmental Law
CIFOR	Center for International Forestry Research
CITES	Convention on International Trade in Endangered Species of Fauna and Flora
DFID	Department for International Development (United Kingdom)
ENA-FLEG	Europe and North Asia Forest Law Enforcement and Governance
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FEMA	Fundação Estadual do Meio Ambiente (Brazil)
FLEG	Forest Law Enforcement and Governance
FLEGT	Forest Law Enforcement, Governance and Trade
FORCOMS	Forest Concession Monitoring System for Central Africa
FUNDECOR	Fundación para el Desarrolo de la Cordillera Volcánica Central (Costa Rica)
GFW	Global Forest Watch (WRI initiative)
GIS	Geographic information system
GPAC	United Nations Global Programme Against Corruption
GPS	Global positioning system
ICFPA	International Council of Forest and Paper Associations
ITTO	International Trade and Timber Organization
IUCN	World Conservation Union
MINAE	Ministry of Environment and Mines (Costa Rica)
NGO	Non-governmental organization
OAS	Organization of American States
OECD	Organisation for Economic Co-operation and Development
PROFOR	Programme on Forests (initiative hosted by the World Bank)
TCAP	Timber Compliance Assessment Partnership
TNC	The Nature Conservancy
TTF	Timber Trade Federation (United Kingdom)
UNFF	United Nations Forum on Forests
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development
WRI	World Resources Institute
WWF	World Wide Fund for Nature

Summary

This joint FAO/ITTO publication examines best practices for improving law compliance in the forest sector. It draws on case studies carried out in Bolivia, Cambodia, Cameroon, Ecuador, Honduras, Indonesia, Italy, Malaysia, Mozambique, Nicaragua and Peru, as well as from experiences in other countries and ongoing international initiatives.

These studies point to a number of underlying causes contributing to the occurrence of illegal activities in the forest sector, including a flawed policy and legal framework and minimal law enforcement capacity in producer countries, insufficient information about forest resources and illegal operations and high demand for cheap timber. Corruption both in the public and private sector was also identified as intrinsically linked to illegal logging and associated trade.

Rather than dwelling on the many complex causes and far-reaching impacts of illegal forestry operations, this report attempts to identify examples of best practices to address the problem. Several countries have recognized the urgent need to develop a comprehensive and coherent strategy to tackle the problem of illegal forestry activities. This report shows that any strategy to address forest crime needs to be based on a sound understanding of the root causes behind the current situation. It presents a short analysis of the reasons why laws are broken along with the current best practices to establish a clear, transparent, sound and coherent forest policy and legislative framework that will foster better law compliance. It also reviews a number of low-cost ways to increase the efficiency and capacity of the public forest administration to foster law compliance and to improve data and knowledge about the forest resource and how it is changing over time.

Because of the complexity of the issue, it is crucial to prioritize remedial actions through a step-by-step approach. Depending on the social, economic and political context, different countries might prioritize different interventions from the wide range of guidelines and best practices provided in this report. In ranking and prioritizing the remedial actions, a central factor is their economic and political feasibility. It is important to assess the financial costs of any intervention and the sources of necessary funds. The political question concerns the degree to which different levels of governments are willing to cooperate in an overall strategy to fight illegality in the forest sector. Political will is crucial to improve forest law compliance and ensure that the measures taken have a long-lasting impact. Lastly, any strategy to fight illegal activities should be based on an open, highly inclusive, multistakeholder process and effective participation of all interested parties. The participation of the private sector, NGOs and civil society may slow down the process, yet there is no doubt that a participatory approach is the best, if not the only way to produce a strategy capable of delivering long-term improvements in forest law compliance and enforcement.

The main conclusions, recommendations and best practices contained in this report are summarized below.

ILLEGAL ACTIVITIES IN THE FOREST SECTOR AND THEIR ROOT CAUSES

- Illegal operations in the forest sector take place when wood is harvested, transported, processed, bought or sold in violation of national laws.
- The underlying causes of illegal operations in the forest sector include a flawed policy and legal framework; minimal enforcement capacity; insufficient data and information about the forest resource and illegal operations; and corruption in the private sector and in government.
- Strategies to improve law compliance in the forest sector must be based on assessment of the underlying causes of illegal acts and identification of the leverage points to combat corruption.
- Several international initiatives have emerged over the last few years to tackle the problem of corruption and illegal forest activities.
- Without comprehensive political will to improve forest law compliance, any measures taken have only a limited chance of success.

TOWARDS A STRATEGY FOR BETTER LAW COMPLIANCE IN THE FOREST SECTOR

- Illegal forest activities have far-reaching economic, social and environmental impacts including government revenue loss, ecological degradation and greater income inequality.
- Any strategy aimed at addressing the problem of illegal activities needs to be holistic and include a wide range of policy, legal, institutional and technical options in order to discourage illegal activities and facilitate legal behaviour.
- Four elements are critical to a successful strategic approach to better law compliance in the forest sector: addressing the underlying causes of illegality, prioritizing remedial actions, assessing the economic feasibility and social acceptability of reforms, and ensuring stakeholder participation.

RATIONALIZING THE POLICY AND LEGAL ENVIRONMENT

A number of steps can be taken in order to streamline and rationalize forest policies and laws, including:

- assessing underlying social, economic, cultural and political causes of non-compliance and modifying the policy and legal framework governing the forest sector accordingly;
- analysing the impact of the forest policy and legal framework on the livelihoods of the poor;
- increasing clarity, transparency and consistency of forest and forest-related legislation, by drafting legislation that is simple, unambiguous, based on tested approaches and containing minimal discretionary powers;
- ensuring a participatory approach to forest law design in order to promote transparency, reduce the potential for corruption, enable people to scrutinize the effectiveness of subsequent implementation, help ensure greater equity and minimize the undue influence of privileged groups;

- encouraging consistency of the regulatory framework to ensure that laws do not contradict others within the forest legal framework or other sectors;
- minimizing bureaucracy, streamlining legal procedures and simplifying regulations, for instance through decentralization, avoiding regulatory proliferation and simplifying forest regulations concerning management planning;
- securing forest land ownership rights in order to ensure accountability and control of forestry operations at the local level;
- ensuring that in-country industrial capacity does not exceed sustainable supplies, for instance, by conducting feasibility studies before new mills are built and/or closing down mills and facilitating timber imports;
- establishing international or bilateral trade agreements with trading partners;
- ensuring cross-sectoral linkages and collaboration to guarantee a coherent and overarching approach to forest issues, for instance, through national forest programmes;
- increasing the competitiveness of legal operations by decreasing the profitability of illegal operations and increasing the profitability of legal ones;
- promoting the independence of the judiciary and transparency of judicial processes.

BUILDING INSTITUTIONAL CAPACITY FOR FOREST LAW ENFORCEMENT

Increasing the efficiency of the public forest administration often requires many more resources than are available in most countries. Yet, relatively low-cost options do exist. These include:

- prioritizing and strategically focusing the law enforcement efforts of the public forest administration on key actions, regions or actors;
- increasing the operational capacity of the forest administration to detect and suppress forest crimes, for instance by re-structuring or creating new institutional bodies and increasing staff number and performance;
- promoting better interagency linkages at national and local levels;
- establishing partnerships with appropriate NGOs, civil society or private sector actors to support enforcement and/or monitoring;
- encouraging the development and use of independent forest certification and voluntary corporate codes of conduct;
- engaging in bilateral agreements with selected trading partners or in multilateral agreements involving a large number of exporting and importing countries to limit illegal timber trade;
- tapping into the forest law compliance programmes of international organizations dealing with natural resource use;
- enabling citizens, supported where necessary by NGOs and government agents, to assist in monitoring and detecting forest crime.

IMPROVING DATA AND KNOWLEDGE

Accurate and up-to-date information is essential for forest crime prevention, detection, monitoring, reporting, investigation and eventually, suppression. Increased data is needed in most countries about the forest resources and about illegal forest activities, in order for governments to identify priorities for remedial actions and to enforce the rule of law.

- Forest resources assessment and monitoring are indispensable, as they will provide baseline data on the state of the forest resources, which will in turn allow monitoring of changes over time.
- A commonly agreed operational definition of illegality between trading partners will enable restriction of illegal timber trade. Countries should identify all elements required to define their standard of legality, taking into account international norms and local circumstances.
- Once a definition of what constitutes illegality in the forest sector has been developed and agreed upon by all stakeholders, the following methods may help improve the data about forest resources and detect forest crime: on-the-ground monitoring and reporting of forest operations; confidential diagnostic surveys of illegal activities aimed at business, government officials, communities and other major actors in the sector; use of informants in the forest sector and of NGOs to obtain up-to-date and timely information about forest resource change and illegal operations; industrial wood input/output estimates to identify illegally sourced supplies; aerial surveillance and satellite detection; log tracking; computerized road checkpoints linked to licence registration systems.
- Comparison of official exports and import statistics can be used to estimate the extent of illegal international trade, especially if discrepancies are large and occur systematically for a number of years.
- Raising awareness about the impacts of illegal forestry is also crucial in order to gain wide acceptance and support for law enforcement in the forest sector by society at large.

THE POLITICAL ECONOMY OF FOREST SECTOR LAW COMPLIANCE

- Interest groups negatively affected by reforms to improve law compliance in the forest sector can undermine the design, legislature or implementation of new rules and regulations.
- Reformers will need to analyse the structure, relative strengths and likely responses of all affected parties and plan accordingly to ensure their support for new regulations.
- The strategies for gaining support from various stakeholder groups will vary according to the political, economic and cultural context of the country.

1. Introduction

An unknown proportion of the world's timber is illegally felled, processed and traded. The problem is most pronounced in developing countries and countries with economies in transition, but it also occurs in developed parts of the world. In several countries, illegal logging is estimated to far exceed the authorized harvest levels and it continues to fuel networks of illegal loggers and traders. Revenues from illegal operations support armed conflicts in some countries and corruption in both the public and private sectors hamper the pace of change.

Illegal logging and associated trade are complex issues with far-reaching environmental, social and economic consequences. The lack of forest law compliance and enforcement often contributes to severe forest degradation and deforestation, including habitat and biodiversity loss, soil degradation and disturbance of forest ecosystem services. This in turn adversely affects rural populations and particularly the poorest forest-dependent communities.

Increased awareness of the magnitude and global implications of illegal activities in the forest sector have triggered various initiatives to control them in both industrialized and developing countries. Efforts are being made at the local, national and international levels by various stakeholders to address the issue. Several governments are in the process of rationalizing their legal and policy framework, building institutional capacity to foster better law compliance and gathering additional data on the extent and nature of illegal operations. Private initiatives such as forest certification, voluntary corporate codes of conduct, independent monitoring of forest operations and log tracking are also helping to fight forest crime.

However, no comprehensive assessment had yet been carried out of the rich experiences being acquired and the lessons learnt for similar undertakings in the future. This report intends to fill this gap. It presents, analyses and distils available knowledge in a set of best practices, which decision-makers may wish to apply to reduce illegal operations in the forest sector. Because governments own or control three-quarters of all global forest resources, or some 3 billion hectares (White and Martin, 2002), and regulate private and community-owned forest management, their responsibility in addressing illegal operations in the forest sector is crucial. This publication is therefore addressed primarily to decision-makers in the forest sector and more particularly to heads of national forest administrations, forest policy analysts, advisers and mid-level forest officials. It is expected to serve as basic material for training officials of interested countries.

This publication was produced by FAO and ITTO. Both organizations have long-running programmes to promote sustainable forest management, and both began specific work programmes on forest law enforcement early in this decade. The severity of the problem of illegal forest activities was identified in FAO's *State*

of the World's Forests 2001 report. Since the fifteenth session of the Committee on Forestry in 2001, FAO has been responding to member countries' recommendations and carrying out various activities to support them in strengthening domestic forest law enforcement, including Costa Rica, Mozambique and Honduras. In 2002, FAO organized a high-level meeting with country experts, international organizations including ITTO and the World Bank, NGOs, specialists from the private sector and research institutions to examine the range of policy reforms that could potentially improve law compliance in the forest sector. ITTO has carried out several country studies, projects and missions designed to lead to improved forest law enforcement. It has also analysed discrepancies in reported trade statistics and the role that these can play in identifying instances of illegal trade. Based on the growing experiences of both organizations in this field, a decision to produce a joint FAO/ITTO report on best practices in forest law compliance was taken in 2004. A peer review group of 20 experts from governments, NGOs and the private sector provided guidance and feedback on a draft version of the publication.

This report is based on studies of the experiences of a number of countries in their efforts to reduce illegalities, as well as on a critical evaluation of experiences in other sectors and the available literature on this theme. It draws on country analyses in Bolivia, Cambodia, Cameroon, Ecuador, Honduras, Indonesia, Italy, Malaysia, Mozambique, Nicaragua and Peru. These countries have all tried, with different degrees of success, to implement practices to curb illegalities in the forest sector. This publication has also benefited from background studies on legal and economic aspects. It focuses on the causes of poor law compliance in the sector and the remedial measures that can be adopted to reduce the impact of these causes. It includes various complementary analyses related to the promotion of non-state initiatives, ways to access international support and understanding and managing the political economy of policy and legislative reform.

The main aims of the publication are to:

- take stock of the knowledge and experience which has been gained at country level;
- provide a critical overview of best practices;
- present best practices for good governance in the forest sector.

Because of the high level of focus on the subject of illegal logging and illegal timber trade and the rapid developments that accompany it, any document of this nature will need to be updated regularly. However, the main purpose of the case studies presented here is to provide an overview of the wide array of actions which have been undertaken at different points by different countries, regardless of whether these actions are ongoing or not. Although some of the actions may not have achieved the expected success for a variety of reasons, often related to political change, they covered useful options that could contribute to improving forest law compliance.

It should be noted that strategies to address illegal forest activities will have to take into consideration the complexity of these acts as well as their underlying

causes. Conditions will vary significantly from country to country. Thus, it is not possible to design detailed policy, legal and institutional schemes of general application, or "magic bullets" that would inexorably lead to better law compliance. Accordingly, this book discusses strategic options rather than providing a detailed blueprint for government action. These will need to be adapted and tailored to the specific context of each country.

Chapter 2 describes the main illegal acts observed in the forest sector. It analyses their economic, social, institutional and cultural root causes, which must be addressed when developing a strategy to curb forest crime.

Chapter 3 focuses on the main consequences of illegal forest operations and outlines the main elements of a strategy for improving law compliance, examined in more detail in the rest of the paper.

Chapter 4 looks at ways to rationalize the policy and regulatory framework and provides examples of best practices to increase the clarity, transparency and consistency of forest-related legislation, minimize bureaucracy and streamline legal procedures and regulations. It also addresses the issues of forest tenure, cross-sectoral collaboration and judiciary independence.

Chapter 5 examines options for building institutional capacity for forest law compliance, through increased focus of the forest administration's actions and increased operational capacity for monitoring forest operations. Public-private partnerships are presented as a viable solution to assist governments in preventing, identifying and suppressing forest crime.

Chapter 6 is dedicated to the issue of identifying and estimating the scope and nature of illegal forest acts through better data collection and information systems.

Chapter 7 looks at the possible strategies governments may adopt to secure broad support for reforms to improve forest law compliance. It is of critical importance to realize that even the best designed initiatives to impose law and order may fail unless they adequately recognize and manage the influence of powerful stakeholders.

The different components of a strategy for better forest law compliance are intimately related and should be mutually supportive. They should not be viewed as discrete actions, each to be implemented in isolation, but rather as part of a holistic strategy to achieve sustainable forest management.

The ultimate purpose of the report is to provide public sector decision-makers with a broad framework for planning and implementing actions to improve legality in the forest sector. It is important to underline that the effectiveness of the proposed measures (and therefore the usefulness of this publication) depends on the political will of governments to improve forest law compliance. Even well-designed initiatives to promote forest law compliance will fail unless there is political commitment at the highest level to address corruption and lack of transparency. There is no easy fix for these fundamental socio-economic problems and the forestry sector may only be able to have a limited impact as the solutions may, to a great extent, lie in other sectors. Therefore, improved intersectoral

collaboration and stakeholder involvement to address underlying socio-economic and cultural factors are also required. Forest law enforcement and governance should not be dealt with solely through national forest and development programmes, but in collaboration with other sectors, and to the extent possible, within existing mechanisms.

2. Illegal activities in the forest sector and their root causes

WHAT ARE ILLEGAL ACTIVITIES?

A wide range of actions

Illegal operations in the forest sector take place when wood is harvested, transported, processed, bought or sold in violation of national laws. While illegal logging and trade of illegal wood products have received international attention, many other illegal operations may occur in the forest sector. A non-exhaustive list is provided in Box 1.

BOX 1

Examples of illegal practices in the forestry and forest industries sector

Illegal logging

- Logging timber species protected by national law
- Buying logs from local entrepreneurs that have been harvested outside the concession
- Logging outside concession boundaries
- Contracting with forest owners to harvest in their land but then cutting trees from neighbouring public lands instead
- Logging in protected areas such as forest reserves
- Logging in prohibited areas such as steep slopes, river banks and catchment areas
- Removing under/over-sized trees
- Extracting more timber than authorized
- Logging without authorization
- Logging when in breach of contractual obligations (e.g. pre-logging environmental impact statement)
- Obtaining concessions illegally

Timber smuggling

- Export/import of tree species banned under national or international law, such as the Convention on International Trade in Endangered Species of Fauna and Flora (CITES Appendix I)
- Export/import of tree species listed under CITES without the appropriate permits (CITES Appendixes II and III)

- Export/import of log, lumber or other timber products in contravention of national bans
- Unauthorized movement of timber across district or national borders
- Movement of illegally logged timber from forest to market
- Exporting volumes of forest products in excess of the documented export quantity

Practices specifically aimed at reducing payment of taxes and other fees

- Declaring sales of forest products below market prices and inflating costs of purchases to reduce declared profits and income taxes
- Manipulating debt cash flows (transferring money to subsidiaries or a parent company where debt repayment is freer than the export of products; inflating repayments allowing larger untaxed repatriation of profits, reducing the level of declared profits and therefore of taxes)
- Overvaluing services received from related companies to reduce declared profits and corporate and income taxes
- Avoiding royalties and duties by under-grading, under-measuring, under-reporting and under-valuing of timber and misclassification of species
- Non-payment of licence fees, royalties, taxes, fines and other government charges

Corrupt procurement

- Restricting information about procurement contracts
- Establishing unnecessary pre-qualification requirements to exclude companies from procurement contracts
- Tailoring contract specifications to fit a specific supplier
- Leaking confidential bidding information to a preferred contractor
- Manipulating bid evaluations to suppress competition

Illegal timber processing

- Processing timber without documentation verifying its legal origin (where required)
- Operating without a processing licence
- Operating without other necessary licences and approvals (e.g. effluent disposal permits)
- Failing to meet licence provisions, including pollution control standards

Source: Callister, 1999

A problem affecting developing and developed countries

While illegal activities are not confined to developing countries, the problems there are usually worse as resources are limited, forest land tenure is often unclear and/or discriminatory against local, forest-dependent communities and civil society is weaker. Therefore, the best practices presented in this report are mostly based on case studies carried out in developing countries.

A problem with considerable economic and social impacts

As in other sectors, the clandestine nature of illegal forest activities makes their scale and value difficult to estimate. In many countries where illegal logging occurs, the volumes of illegally harvested wood may exceed the official annual wood harvest. For example, illegal harvests in Indonesia were estimated to have reached up to double the officially sanctioned harvest level of 25-30 million m^3 during the 1990s (Richards, 2004). Furthermore, illegal logging and illegal timber trade are usually associated with other illegalities, such as money laundering, drug trafficking, corruption of government officials and tax evasion. Thus, illegal logging and illegal timber trade can lead to huge tax losses for governments as well as negative long-term economic impacts caused by environmental degradation and increased poverty. Illegal logging also jeopardizes the livelihoods of rural communities engaged in small-scale forestry by exposing them to unfair competition and depleting the resources on which they depend. Unless these problems are addressed, investments to promote sustainable forest management will remain ineffective.

ROOT CAUSES OF ILLEGAL ACTIVITIES

Case studies in the eleven countries examined for this report indicate that there are five general factors contributing to the occurrence of illegal activities in the forest sector (Box 2):

- flawed policy and legal framework;
- minimal enforcement capacity;
- insufficient data and information about the forest resource and illegal operations;
- corruption in the private sector and in government;
- high demand for cheap timber.

Flawed policy and legal framework

A number of illegalities in the forest sector can be traced back to inadequate policy and legislation (Box 3). Laws may be technically unrealistic if they prescribe activities, procedures and institutional arrangements which are not matched by adequate financial and human resources in government and civil society. Laws might also be perceived as unfair and be socially unacceptable, for instance when they neglect or even penalize local practices and norms. In many cases, laws are inconsistent or conflicting with other bodies of legislation and the consequences of their implementation are badly assessed. Combined with lack of public participation in law design and forest-related decision-making processes, this can lead to long-term adverse social, economic and environmental impacts, including increased levels of illegal forest operations (Box 4). Forest land tenure is also often unclear or discriminatory. It is therefore of utmost importance to reform the policy and legal framework in order to ensure that such flaws are eliminated and compliance facilitated. Examples of best practices to develop a sound policy and legal framework are presented in Chapter 4.

BOX 2

Factors contributing to illegal operations in the forest sector

Flawed policy and legal framework

- Lack of adequate and overarching policy involving all relevant stakeholders
- Legislation that is unfair (for example, that does not recognize local and traditional customary rights)
- Legislation that is unrealistic and unenforceable
- Contradictory and inconsistent policies and legislation, with forest laws and regulations contradicted by legislation in other sectors (agriculture, mining, oil exploitation or infrastructure development)
- Confusing legislation, with unclear rules leaving room for interpretation
- Legislation with a multitude of operational norms, often overlapping each other
- Failure of legislation to generate sufficient incentives for sustainable forest management, and excessively weak disincentives for illegal acts
- Unclear legal property rights, including those of government

Poor implementation capacity of the public forest administration and enforcement agencies

- Lack of resources for enforcement in both the forest service and enforcement agencies
- Inadequate intra- and interagency coordination
- Lack of long-term strategizing and prioritizing regarding the use of available resources
- Excessive discretionary power and corruption
- Inexistent or poor mechanisms for resolving disputes

Insufficient data and information about illegal acts

- Poor knowledge about the condition of the forest resource and its changes over time (weak baseline data and monitoring capacity)
- Insufficient knowledge about the causes of such changes and their consequences
- Deficient dissemination and use of existing data and knowledge

Corruption and lack of transparency

- Potential for arbitrary decisions and corruption when government agencies or private entities are not required to make their decisions public

Poor implementation/enforcement capacity

Many forest laws are not utilized or under-utilized due to lack of political will, weak institutional capacity, corruption, overall disregard for the rule of law and so on. While improving law implementation requires attention to external economic, social and institutional factors, law enforcement can also be significantly influenced

BOX 3

Common weaknesses of forest policy and legal framework

- Legislative overreaching: provisions that exceed national capacities for implementation; provisions that exceed what is necessary to achieve reasonable and legitimate objectives; provisions that exceed what is socially acceptable
- Unnecessary, superfluous or cumbersome licensing and approval requirements
- Lack of provisions for the transparency and accountability of forest decision-making processes
- Lack of participation/consultation with local non-governmental actors in the sustainable management of forests
- Lack of participatory processes in the drafting of laws
- Ineffective direct law enforcement mechanisms set forth in forestry legislation

Source: Lindsay, Mekouar and Christy, 2002

by the way legislation is drafted in the first place (see previous section). There is therefore a danger in making too much of a distinction between legislation, on the one hand, and its implementation on the other (Lindsay, Mekouar and Christy, 2002). None the less, case studies carried out for this report show that many governments lack the necessary human, financial and managerial capacity to effectively ensure forest law compliance. When government institutions are weak, there is a greater inclination to engage in illegal activities, as the probability of being detected and punished is low. Best practices to build institutional capacity for law enforcement and use available resources in the most efficient way, along with examples of partnerships that improve compliance are given in Chapter 5.

Lack of information about the forest resource and illegal operations

Successful strategies to improve law enforcement rely on a solid knowledge of the resource base and its utilization, which governments and the general public in many countries do not possess. Forest inventories and forest management plans are either inadequate or non-existent. Many forests are located in remote and inaccessible areas, making monitoring difficult. Governments often make uninformed decisions, such as establishing allowable annual cut limits without adequate knowledge of the forest resource's sustainable yield. Without information on industrial capacities and/or utilization efficiencies, it is difficult to judge the extent to which illegal wood is being utilized. Lack of accurate information also makes it difficult to identify and monitor the occurrence and evolution of illegal acts. Forest inspectors have little knowledge of how to gather and preserve evidence against illegal operators and judges are seldom familiar with the nature of illegal forest activities. Even when information is available, it is often not used efficiently and/or shared among the relevant government agencies and

BOX 4

Logging bans might contribute to increased levels of illegal operations

Illegal harvesting is a common concern, both prior to and following the imposition of logging bans. For instance, in Viet Nam, due to the 1997 logging ban and timber shortages, the volume of illegal logging increased to at least 100 000 m^3 annually.

Logging bans might also have disruptive effects on neighbouring countries through legal and illegal trade, timber smuggling, and market disruptions. There have been allegations that Thailand's 1989 logging ban resulted in both illegal logging and greater imports along the borders with Laos, Cambodia and Myanmar. Protection of natural forests in China has led to greater imports from Myanmar and the Russian Federation, potentially contributing to unsustainable harvesting in northern Myanmar, the Russian Far East and East Siberia.

Adverse economic and social impacts have also occurred, further undermining the incentives for sustainable forest management. Lack of public participation in designing and implementing logging bans or in recognizing local dependency on forests frequently results in local resistance and continued illegal activities for day-to-day survival, especially in the absence of safety-net policies that address adverse social and economic impacts.

Only where logging bans have been accompanied by transitional adjustment policies for alternative timber supplies, social and economic safety nets to minimize local burdens, and sustained and effective conservation management, have they proven effective as a conservation strategy. This is the case in New Zealand where natural forests have been placed under the separate administration of a Department of Conservation with supporting policies, operational support and professional staffing, and where a strategy for ensuring industrial timber supplies from plantations was developed decades before the 1987 transfer of all state owned natural forests to conservation status.

Source: FAO, 2001b

stakeholders. Improving law compliance therefore requires improved knowledge of the forest resource and improved means to monitor changes over time. Examples of best practices are presented in Chapter 6.

Corruption and lack of transparency

Many illegal activities in the forest sector are associated with corruption. Corruption is a complex social, political and economic phenomenon. It involves the use of one's position for illegitimate private gains (Box 5). Although perceived differently from country to country, corruption tends to include the following types of behaviour: conflict of interest, embezzlement, fraud, bribery, political corruption, nepotism and extortion. In this publication corruption refers to deeds which engage public

BOX 5

What is corruption?

Etymologically the word "corruption" comes from the Latin verb "corruptus" (to break); it literally means a broken object. Conceptually, corruption is a form of behaviour, which departs from ethics, morality, tradition, law and civic virtue.

The classic definition, followed by the World Bank and Transparency International, views corruption as the use of one's public position for illegitimate private gains. Abuse of power and personal gain, however, can occur in both the public and private domains and often in collusion with individuals from both sectors. Information International in Lebanon therefore adopted the following definition: "Corruption is the behaviour of private individuals or public officials who deviate from set responsibilities and use their position of power in order to serve private ends and secure private gains".

The United Nations Global Programme Against Corruption (GPAC) defines corruption as the "abuse of power for private gain" and includes thereby both the public and private sector.

Source: United Nations office on Drugs and Crime (UNODC), 2005

officials and private interests, involve public and sometimes private property and power, are perpetuated for private gain and are intentional and surreptitious.

Corruption in the forest sector involves:

- payment of bribes to government officials and politicians for preferential treatment (for example award of a procurement contract, a timber concession or a subsidy);
- financial extortion by officials from operators to artificially legalize illegal operations (transportation permits, harvesting licences, forest land use conversion);
- official decisions that favour certain groups (for instance when allocating timber concessions [see Box 6]), with the tacit understanding that the group will eventually repay the favour;
- timber companies evading national regulations with relative impunity, thanks to the protection of powerful patrons.

The reasons for which corruption develops vary from one country to another. Among the contributing factors are: faulty government policies; programmes that are poorly conceived and managed; failing institutions; inadequate checks and balances; lack of strong and organized civil society groups; a weak and/or corrupt criminal justice system; inadequate civil servants remuneration; and a lack of accountability and transparency (UNODC, 2005).

Because forests represent a high-value natural resource often under government control or regulation, they offer an important potential source of political power, and a correspondingly high risk of abuse of that power. In some cases,

BOX 6

Common corrupt practices in the award of concession and procurement contracts

- Artificially increasing discretion in awarding contracts (e.g. by splitting contracts into smaller subcontracts and thus circumventing requirements of higher-level approval, or by drafting ambiguous bidding and contract rules to increase discretionary power of decision-makers)
- Restricting information about the contract to give precedence to preferred parties
- Establishing unnecessary prequalification requirements that can only be satisfied by the preferred party
- Tailoring specifications that only a preferred party can satisfy
- Leaking confidential information about supposedly competitive bids to a preferred party
- Distorting the evaluation phase of bids by introducing unclear criteria for selection and obscure exceptions to the contract award rules
- Potential bidders entering into collusive arrangements
- Potential bidders offering bribes to bid evaluators
- Potential bidders offering unrealistic performance in order to win the bid and then offering bribes to controllers to avoid penalties
- Bidders presenting false documentation about their financial situation and later speculating with the concessions obtained
- Using the forest control agents to deliberately find faults with the current operations of unfavoured bidders, so that they are rendered ineligible to bid

Source: Based on Wesberry, 2001; D. Young, Global Witness, personal communication, 2005

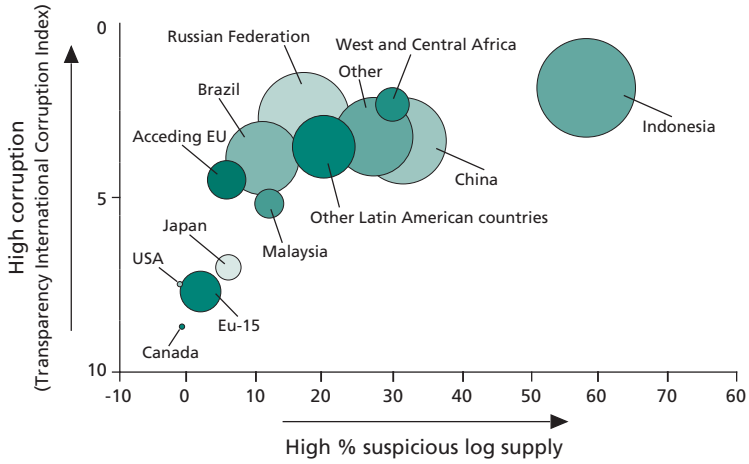
corruption in the forest sector might be an intrinsic part of the patronage systems that sustain the power of a country's ruling elite (Global Witness, 2004a). State forestry institutions might be subject to regulatory capture, becoming the clients of the ruling elite's concession-holding industrial interests. A mutually beneficial relationship between selected private interests and corrupt government officials is created and sustained at the expense of the public good.

Lack of transparency in the public forest administration and other agencies such as the police and the military, unclear accountability structures, complex administrative procedures and lack of public disclosure of key documentation are all elements which should be addressed when building a strategy to increase law compliance in the forest sector. Examples of best practices are given in Chapter 4.

The strong correlation that exists between perceived corruption levels and the extent of suspected illegal log supply is shown in Figure 1.

Several international initiatives have been developed over the last few years to tackle the problem of corruption (Box 7). However, a serious impediment to

FIGURE 1
Relationship between corruption and suspected illegal forest activities



Source: Seneca Creek Associates and Wood Resources International 2004

BOX 7
Major international anti-corruption instruments since 1996

The plethora of legal anti-corruption instruments that have come into being since the mid 1990s is indicative of the increased seriousness with which corruption is now being taken. Most notably, these instruments include:

- Organization of American States (OAS) Inter-American Convention Against Corruption, 1996
- Organisation for Economic Co-operation and Development (OECD) Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, 1997 (www.oecd.org/document)
- EU Convention on the Fight Against Corruption Involving Officials of the European Communities or Officials of Member States of the European Union, 1997 (www.europa.eu.int)
- Council of Europe Criminal Law Convention on Corruption, 1999 (conventions.coe.int/treaty/en/Treaties/Html/173.htm)
- Council of Europe Civil Law Convention on Corruption, 1999 (conventions.coe.int/treaty/en/Treaties/Html/174.htm)
- African Union Convention on Preventing and Combating Corruption, 2003 (www.africa-union.org/home/Welcome.htm [see Official Documents])
- United Nations Convention Against Corruption, opened for signatures in December 2003 (www.unodc.org/unodc/en/crime_convention_corruption.html)

Source: Transparency International, 2004b

the success of any anti-corruption strategy is a corrupt judiciary. If the judiciary is corrupt, the legal and institutional mechanisms designed to curb corruption, however well-targeted, efficient or honest, remain crippled. Unfortunately, evidence is steadily surfacing of widespread judicial corruption in many parts of the world (UNODC, 2005). Chapter 4 gives examples of best practices which can be applied by national governments to limit corruption in the forest sector and promote the independence of the judiciary.

Demand for timber

In some countries the growing timber market often contributes to overcapacity of the forest industry or excessive log exports from the exporting countries, which can in turn lead to illegal forest operations. Although this publication does not address the issue directly, focusing instead on the actions which can be taken at the domestic level by timber producing countries, Annex 3 provides an overview of various multilateral and bilateral initiatives aiming to promote responsible timber trade between producing and importing countries. Reducing demand for illegal timber, at least until more exporting countries are on a sustainable footing, should be a key component of future international cooperation.

CONCLUSIONS

- Illegal operations in the forest sector take place when wood is harvested, transported, processed, bought or sold in violation of national laws.
- The underlying causes of illegal operations in the forest sector include a flawed policy and legal framework; minimal enforcement capacity; insufficient data and information about the forest resource and illegal operations; and corruption in the private sector and in government.
- Strategies to improve law compliance in the forest sector must be based on an assessment of the underlying causes of illegal acts and the identification of the leverage points to combat corruption.
- Several international initiatives have been developed over the last few years to tackle the problem of corruption and illegal forest activities.
- Without comprehensive political will to improve forest law compliance, any measures taken have only a limited chance of success.

3. Towards a strategy for better law compliance in the forest sector

CONSEQUENCES OF ILLEGAL ACTIVITIES AND CORRUPTION

Illegal activities have far-reaching economic, social and environmental impacts, including government revenue loss, ecological degradation and greater income inequality.

Lack of social and ecological sustainability

Many forest laws prescribe the adoption of sustainable management objectives, including social welfare (livelihood support, recreation, etc.) and the protection of forest ecosystem services (watershed protection, carbon sequestration, biodiversity conservation, etc.), which have no market price and may therefore be of little interest to private operators and governments working towards short-term political and private gains. Operating in illegal ways precludes achieving these societal and environmental objectives and can lead to widespread environmental damage. Illegal activities can be a threat to biodiversity, and in some cases may breach the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Market distortions

Illegal activities may distort the entire global marketplace for a number of key timber products, thereby hampering sustainable management, which is subject to higher costs associated with good husbandry, proper tax declaration and so on. Illegal operations depress the market value of forest products, reduce the comparative profitability of sustainably produced forest products and give a competitive advantage to illegal operators. The difference between legal and illegal production costs, and thus the magnitude of price rises expected if illegal activities were eliminated, can be substantial. For example, an analysis carried out in the United States estimates that domestic roundwood prices would be 2 to 4 percent higher if "suspicious" global roundwood production were eliminated. United States exporters, in the absence of competition from illegal operators, would be able to increase their exports of wood products by an estimated US$460 million per year (Seneca Creek Associates and Wood Resources International, 2004).

Lack of responsible investments

While responsible investors shy away from countries where the rule of law is weak and where investment risks are consequently high, unscrupulous corporations find this kind of environment favourable. Over time, corporations which engage in illegal operations may manage to dominate the sector in such environments.

If financial proceeds of these illegal operations are sent abroad, they limit possibilities of re-investment in the forest sector.

Decreased government revenues

Illegal activities represent a major loss of revenue to many countries by depriving governments of income from taxes, stumpage fees and other costs associated with legal forestry. For instance, it is estimated that government losses due to evasion of the Felling Tax alone are between US$5 and US$10 million per year in Cameroon (Auzel *et al.*, 2002). The World Bank estimates that illegal logging results in additional losses of at least US$10 to 15 billion per year of forest resources from public lands alone (World Bank, 2005). A Senate Committee in the Philippines estimated that the country lost as much as US$1.8 billion per year from illegal logging during the 1980s. The Indonesian Government estimated in 2002 that costs or foregone revenues related to illegal logging were US$3 billion a year.

Increased income inequity

It is sometimes argued that the rural poor may benefit from weak law enforcement as they may illegally enter public lands and use forest resources without paying taxes or other usage fees. While the interactions between illegal activities and inequality are very complex, the cases examined for this publication show that when the rule of law is weak, major stakeholders wielding considerable power eventually tend to dominate the utilization of forest resources (Box 8). Corruption affects the livelihoods of the poor more than those of the better off (Transparency International, 2004a). Benefits of illegal acts accruing to the poor are therefore likely to be transitory. Moreover, illegal acts also weaken the capacity of government to provide services to the forest-dependent poor, such as technical assistance and proper delimitation and consolidation of property rights.

BOX 8

Income from illegal logging: do the poor benefit?

While illegal logging may inject large amounts of cash into an area, benefits in terms of livelihoods are thin and temporary. In the Sico-Paulaya valley, Honduras, legalized and clandestine production of about 11,000 m³ of mahogany over 2000 and 2001 brought local people about US$1.2 million in wages and profits. However, over half of the income was grabbed by powerful community members, eventually leaving only about a quarter of it for poorer groups. After the misappropriation of funds by elites and the purchase of chainsaws for the cutting operation itself, only 6 percent of the value of the timber produced could ultimately have been invested in local livelihoods, and it is likely that the poorest households captured very little of this.

Source: Wells *et al.*, 2004

Political instability

Illegal forest operations can be linked to conflicts and wars. In some countries, timber is traded by armed groups, be they rebel factions or regular soldiers, or by a civilian administration involved in armed conflicts to either perpetuate conflict or take advantage of conflict situations for personal gain. "Conflict timber" trade undermines the development of democratic institutions and political stability. The substantial revenues from illegal logging sometimes fund and thereby exacerbate national and regional conflicts, as in Cambodia, Liberia and the Democratic Republic of Congo.

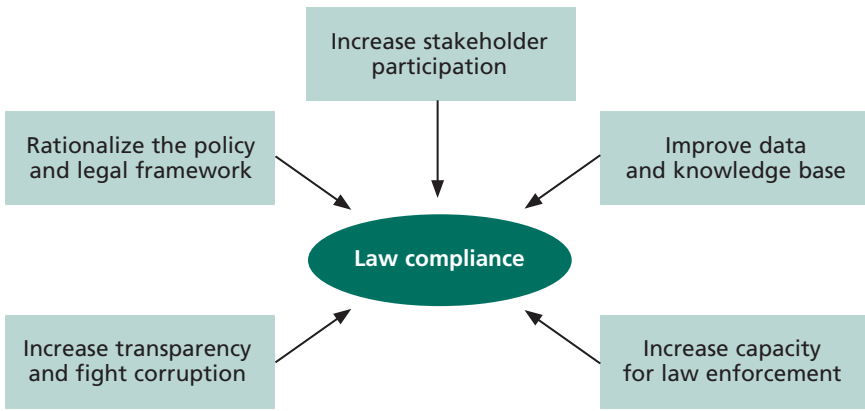
NEED FOR A STRATEGIC APPROACH

Factors contributing to the occurrence of illegal operations in the forest sector are multiple as well as inter-related. Thus, any strategy aimed at addressing the problem of illegal activities needs to be holistic and include a wide range of policy, legal, institutional and technical options (see Figure 2) in order to:

- rationalize the policy and legal framework (Chapter 4);
- build capacity for law enforcement (Chapter 5);
- improve data and knowledge about the forest resource and the forest sector in general (Chapter 6);
- address corruption.

A strategic approach should carefully balance measures to discourage illegal activities, such as stricter controls and punishments, with activities that encourage legal behaviour such as incentives and simplified regulations. Measures aimed at increasing control alone are seldom successful where the economic attractiveness of illegal behaviour remains. In these cases, illegal operators will always find a way to circumvent controls.

FIGURE 2
Elements of a strategy to promote legality in the forest sector


Increase stakeholder participation
Rationalize the policy and legal framework
Improve data and knowledge base
Law compliance
Increase transparency and fight corruption
Increase capacity for law enforcement

A few countries have already recognized the urgent need to develop a comprehensive and coherent strategy to tackle the problem of illegal logging in consultation with a range of stakeholders. Costa Rica and Indonesia, for instance, are developing strategies based on prevention, detection and suppression of illegal activities (Boxes 9 and 10).

In carrying out the above-mentioned steps, four elements appear critical:

- ***Addressing the underlying causes of illegality.*** Any strategy to curb illegal activities in the forest sector should be based on a sound understanding of

BOX 9

The Costa Rican National Strategy to Combat Illegal Logging

In 2001 Costa Rica approved its National Forest Development Plan after a lengthy process involving all important stakeholders. One of the priority actions of the Plan is the control of illegal logging in the country, which has become a serious problem in recent years. The Plan estimated that at least 25 percent of the timber produced in Costa Rica comes from illegal sources. The Ministry of Environment and Mines (MINAE) commissioned a series of studies to analyse the root causes of illegal logging and propose measures to overcome the problem. On the basis of the results and with the assistance of different stakeholder groups, particularly the NGO Fundación para el Desarrollo de la Cordillera Volcánica Central (FUNDECOR), in 2002 MINAE developed a comprehensive, five-year strategy aiming to:

- promote and strengthen technical, administrative and legal structures that facilitate the control of forest harvesting;
- improve the instruments that are necessary to monitor social behaviour and the use of forest resources;
- strengthen the management capacity of the Forest Administration regional offices;
- promote, coordinate and ensure the active and efficient participation of civil society in the prevention of illegal forestry acts.

The strategy consists of a wide range of measures to prevent, detect and control illegal forest activities. It includes measures to discourage illegal logging (stricter control using geographic information systems [GIS] and global positioning systems [GPS], forest control brigades, internal and external auditing) as well as those designed to encourage legal behaviour (simplifying regulations, reviewing the forestry law, promoting reforestation and forest management). An external advisory group consisting of representatives of different stakeholder groups such as research institutions, NGOs, private sector representatives, environmentalists and the professional association of private foresters assists the government in the implementation of the strategy.

Source: MINAE, 2002

BOX 10

The Indonesian National Strategy to Combat Illegal Logging

The Government of Indonesia has recognized the urgent need to tackle the problem of illegal logging. Over the last two years, a wide range of stakeholders have participated in a detailed assessment and series of consultations to develop a strategy to combat illegal logging.

The strategy resulting from these consultations is summarized as a ten-point Action Programme:

- ***Action 1, Demonstrate commitment and create accountability:*** establish a politically balanced multistakeholder commission to initiate, organize, monitor and coordinate the Programme, and appoint an individual directly accountable to the President to head it.
- ***Action 2, Determine legal sources of timber:*** identify and build consensus on legal timber sources to enable law enforcers, buyers and consumers to distinguish legal from illegal timber and publish clear guidelines on what constitutes legal timber.
- ***Action 3, Improve detection:*** implement central collection and analysis of information needed to detect harvesting, transportation and processing crimes. This should include maps, remote sensing imagery, harvest permits and licences, transportation documents, and processing licences and records.
- ***Action 4, Archive data:*** establish a permanent national forest sector database and maintain up-to-date and complete information on the harvesting, processing and transportation of timber.
- ***Action 5, Ensure transparency:*** disclose information on the harvesting, processing and transportation of timber to the general public, where such information is not directly needed for the prosecution of forest crime.
- ***Action 6, Rationalize the industry:*** bring Indonesian mill demand into balance with the nation's legal timber supply and reduce pressure for illegal logging by developing a comprehensive wood processing industry rationalization plan that identifies and mandates a reduction in consumption of logs by factories.
- ***Action 7, Promote legal timber trade:*** reduce demand for illegal timber and stimulate demand for legal timber by promoting legal and sustainable timber in the domestic market, and by entering into agreements with main international trading partners to import only legal timber.
- ***Action 8, Build enforcement capacity:*** strengthen all relevant agencies, including forestry, police, the military, the judiciary, transport and customs, through institutional reform, interagency cooperation and training on forest-related laws and regulations, evidence collection, assembling case files, and pursuing chains of complicity in a way that ensures that the principal actors of illegal logging, rather than poor local people, are penalized.

- ***Action 9, Amend laws:*** where necessary, amend national laws and regulations to strengthen enforcement efforts and ensure the prosecution, conviction and proportionate and dissuasive sentencing of key forest criminals – including the organizers and financiers of illegal logging and buyers of illegal timber.
- ***Action 10, Prosecute and convict forest criminals:*** Ensure that major actors who facilitate, organize, finance and benefit significantly from forest-related crime are arrested, vigorously prosecuted and, if found guilty, convicted and punished to the full extent allowed by law.

Source: H. Speechly, DFID, personal communication, 2005.

the root causes behind the current situation. It is fundamental to identify the root causes of illegal acts and ways to combat them, as well as the leverage points.

- ***Prioritizing remedial actions.*** A comprehensive package of complementary actions is needed in order to address illegality in the forest sector. A step-by-step approach might be necessary, as it will be difficult to address all elements of the strategy at once. Depending on the social, economic and political context, different countries might prioritize different interventions among the wide range of guidelines and best practices provided in this report. Entry-points and sequencing must be carefully analysed and planned at the national level and must reflect governmental and donor resources available.
- ***Economic and political feasibility.*** In ranking and prioritizing the remedial actions, a central factor is their economic and political feasibility. It is important to analyse the financial costs of any intervention and the sources of necessary funds. The political question concerns the degree to which different levels of governments are willing to cooperate in an overall strategy to fight illegality in the forest sector. Without comprehensive political will to improve forest law compliance, any measures taken have only a limited chance of success (see also Chapter 7).
- ***Stakeholder participation.*** Any strategy to fight illegal activities should be based on an open, highly inclusive, multistakeholder process, based on effective participation of all interested parties. The participation of the private sector, NGOs and civil society is crucial. Although this may slow down the process, there is no doubt that a participatory approach is the best, if not the only way to produce a strategy capable of delivering long-term improvements in forest law compliance and enforcement.

CONCLUSIONS

- Illegal forest activities have far-reaching economic, social and environmental impacts including government revenue loss, ecological degradation and greater income inequality.
- Any strategy aimed at addressing the problem of illegal activities needs to be holistic and include a wide range of policy, legal, institutional and technical options in order to discourage illegal activities and encourage/facilitate legal behaviour.
- Four elements are critical to ensure a successful strategic approach to better law compliance in the forest sector: addressing the underlying causes of illegality, prioritizing remedial actions, assessing the economic feasibility and social acceptance of reforms and ensuring stakeholder participation.

4. Rationalizing the policy and legal environment

It is often assumed that if laws were strictly enforced, all would be well in the forest sector. However, due to a number of policy and legal failures, stricter forest law enforcement does not always contribute to legal and sustainable forestry. Before identifying ways to build institutional capacity to foster better law compliance (Chapter 5), this chapter provides guidelines and examples of best practices to develop a sound policy and legal framework with provisions to reduce the attractiveness of illegal and corrupt practices for operators in the forest sector.

ASSESSING THE UNDERLYING CAUSES OF NON-COMPLIANCE

Assessing the complex social, economic, cultural and political causes of forest law violation will enable the root causes of the problem to be addressed rather than its symptoms.

Why do people break the law?

There are many reasons why people break the law, and motivations will vary extensively depending on the actors involved and the activities they are engaged in. Powerful actors may engage in lucrative illegal logging on a wide scale because they know that in certain settings they can get away with it. Poor farmers may commit minor illegal acts on a daily basis because they feel they have no choice. There may be any number of other contributing factors: unclear and/or discriminatory land tenure systems contributing to a lack of local responsibility for sustainable forest stewardship; prohibition of subsistence use by people whose livelihoods depend on forest products; cumbersome bureaucratic procedures and complex legal demands; policy and legal failures making illegal operations more profitable than legal activities; weak law enforcement and low penalties for illegal operators when caught; and unfeasible provisions creating the perception among forest users that the law is unfair and out of touch with reality. Forestry-related laws and regulations might be difficult to respect in some cases, especially for small producers and disadvantaged rural communities, who may not have the means to follow costly and complex legal requirements or who are excluded from benefits of nearby forests.

Impact analysis of the regulatory framework

An important task in strengthening forest law compliance is to examine the policy and legal framework governing the forest sector and to eliminate requirements that are impossible to comply with or contradictory. This task must be based on an analysis of

how regulations affect actors in the forest sector, in terms of their financial, technical and managerial ability to follow legal requirements and in terms of their needs. The financial impacts of regulation on the main stakeholders can be analysed using standard economic analysis techniques. In cases where regulations reduce profitability thereby precluding realistic compliance, such as in the Bolivian example (Box 11), the government may consider support in the form of financial incentives and/or compensation to induce forest operators to comply with the law on a voluntary basis (see section below on increasing the profitability of legal operations).

Impact of the regulatory framework on the rural poor

Forest-dependent communities are less likely to comply with forest laws if they think that to do so will endanger their livelihoods. Policies designed to control illegal activities in the forest sector, such as logging bans, have sometimes proven counter-productive because powerful political interests continue to find means to log the forests while more vulnerable poor and small-scale forest producers have been unable to find alternative livelihoods (Molnar *et al.*, 2003). Consequently, further impact analyses should be carried out to investigate the possible effect of the law on the livelihoods of the poor (Box 12). Many of these impacts will not be covered in the financial analyses mentioned above simply because many of the forest products that are essential for the livelihoods of poor populations do not enter formal markets and therefore do not have market prices. Controls on trade in illegally harvested timber and forest products may result in communities finding that their subsistence and commercial activities are not recognized or permitted, undermining their incentives for sustainable and legal forest use.

BOX 11

Impact analysis of the regulatory framework

After the approval of a new Forestry Law in Bolivia in 1996, there was considerable debate surrounding the financial viability of sustainable forest management in the context of the new regulations which established new forest fees. An economic analysis of the financial implications of the new rules was carried out and it was found that while sustainable forest management practices following the new regulations were still capable of earning positive rates of return, they were less profitable than traditional logging practices. The new regulations had imposed additional burdens on forest operators that reduced their profitability. The analysis concluded that loggers would therefore not be motivated to comply with the new law, and raised doubts about the chances of the forest sector as a whole following the law. This kind of impact analysis should be carried out in all countries to test the feasibility of new legal prescriptions.

Source: Bojanic and Bulte, 2002

BOX 12

Task force rethinks logging ban in China

A recently released report, *Implementing the natural forest protection program and the sloping land conversion program: lessons and policy recommendations*, found that the blanket application of the logging ban by several provinces in China is not the best way to conserve forests, but that a more fine-tuned, location-specific approach (including financial and institutional measures) would yield better results. Among other recommendations, the report found that it would be more effective to limit illegal forestry operations and improve rural livelihoods by: removing the ban on logging from collectively owned forests where appropriate; developing an exit strategy to move from the logging ban on state-owned forests to their sustainable management; and developing a forest land use plan which ensures protection of old growth natural forests. Calling for the active participation of local officials (including from other sector agencies) and representatives of stakeholders, the report advises improving the targeting and implementation of the program by adopting specific environmental targeting criteria and more market-based mechanisms.

Source: China Council for International Cooperation on Environment and Development (CCICED), 2002

Mozambique has made a remarkable effort in recent years to analyse the forest and wildlife law in the context of poverty alleviation. Poverty reduction is one of the main overall objectives of Mozambican society. Like all other sectors, the forest and wildlife subsector has designed its policy and development strategy based on this national objective. Improving forest law enforcement should, therefore, have a positive impact on poverty reduction although this assumption should not always be taken for granted (Box 13).

Impact of the regulatory framework on big business

Legal forestry operators often fear being undermined by less scrupulous competitors and government pressure. Moreover, large companies operating illegally are sometimes found to be linked to the funding of conflicts and the provision of arms to governments or rebel groups in the countries in which they operate (Global Witness, 2004b). Any company prepared to tackle vested interests may be threatened with having its concessions terminated and awarded to less scrupulous competitors.

However, recent research shows that if all exports associated with illegally harvested logs were phased out by 2007, international roundwood, lumber, and wood panel prices would rise by 19 percent, 7 percent, and 16 percent, respectively, and companies operating legally would significantly increase their earnings (Seneca Creek Associates and Wood Resources International, 2004).

It is therefore crucial to ensure that the regulatory frameworks strengthen the government's control over its natural resources and the domestic timber industry

BOX 13

A pro-poor forestry strategy for forest crime prevention, detection and suppression in Mozambique

In the last decade, Mozambique has been engaged in a participatory process to completely review and transform the policy and legal framework for the forest and wildlife sector, in order to guarantee its effective contribution to poverty reduction and sustainable development. The forest policy/legal reform has produced an advanced and sound legislation for this sector. Various systems of forest use are now in place, ranging from the award of long-term (50 year) secure concessions to loggers, to community-managed resources and fully protected areas. Although there are still several regulatory measures yet to complete, their preparation is going ahead. Once this process is concluded Mozambique will have adequate legal provisions for tackling illegal forest acts through a strategy based on prevention, detection and suppression, while contributing to poverty alleviation. The current challenges for improving forest law compliance in Mozambique do not concern the policy/legal framework, but rather the capacity to monitor forest production and trade.

Source: Del Gatto, 2003

by integrating transparency and accountability into the industry's operations and by working with the international community to ensure that the government has adequate capacity to manage the logging industry and phase illegal operators out of the marketplace.

INCREASING CLARITY, TRANSPARENCY AND CONSISTENCY OF FOREST AND FOREST-RELATED LEGISLATION

Establishing a sound and coherent forest policy prior to law-making

As mentioned earlier, a sound and coherent policy framework is a prerequisite to the development of clear, transparent and consistent legislation. Laws are only instruments to implement an overall strategy, and it might be necessary to conduct an all-encompassing review of the forest policies in place before drafting or redrafting forest and forest-related laws. In 1998-1999, Ecuador conducted a multistakeholder process to develop a sound forest policy with a set of objectives and five general priorities, which now provide an overall framework for the development of forest laws (Box 14).

Promoting clarity and understanding

One of the fundamentals of good legislation is that laws are communicated to and understood by those stakeholders most affected by them. Legal clarity contributes to compliance, reduces the possibility of arbitrary interpretation of the law by government officials and facilitates the task of the judiciary. Clarity will be achieved by:

BOX 14

Forest policy reform in Ecuador

In 1998/99 the government organized a nation-wide multisectoral process to review the 1995 forestry policies and turn them into immediate and concrete action strategies. By mid-1999, the Sustainable Forestry Development Strategy of Ecuador was established following a consensus between several actors in the forestry sector, including environmental and industry interests, local and indigenous peoples and communities, professional associations and academics. This new forestry strategy defines the forestry policy as the "guiding framework in order for all the actors, institutions, organizations, groups or individuals involved, to be able to follow and determine, accordingly, future decisions related to the forestry sector. The base for sustainability along this policy implementation is the active participation of civil society in the different institutions and at the different decision levels." The forestry policy consists of a set of objectives, strategies and actions for implementation over the next 20 years.

It also contains the following set of innovative guiding principles, which must be reflected in the legislation and the institutional setting in order to promote cohesion and consistency:

- support and promote sustainable forest management;
- highlight specialization and complementarities;
- facilitate strategic alliances;
- delegate functions to civil society;
- efficiency, transparency and simplification of processes;
- autonomy and flexibility;
- participation and mutual responsibility.

Source: Thiel, 2004

- establishing a clear forest policy framework;
- drafting legislation that is simple, unambiguous, based on tested approaches and containing minimal discretionary powers;
- harmonizing legal/forest-related definitions;
- ensuring clear demarcation between national, regional and local authorities over the allocation and control of forest resources;
- raising awareness about the regulatory framework.

Establishing mechanisms for participatory law-making

Ensuring a participatory approach to forest law-making will promote transparency, reduce the potential for corruption, ensure greater equity, minimize the undue influence of privileged groups and encourage parties to follow legal requirements. It will also enable stakeholder groups to voice their concerns and protect their

rights from arbitrary unilateral decisions by governments. In Honduras and Ecuador for example (Box 15), a conscious effort to ensure the integration of various points of view was carried out by favouring a participatory process in the design of the new forestry laws and technical norms. Public involvement in forestry policy is essential in order to formulate a policy that acknowledges people's needs and capacities.

Making sure the law includes feasible and meaningful opportunities for genuine participation by different stakeholders in management and decision-making

Stakeholder participation will take different forms according to socio-economic and institutional contexts, but the following general guidelines for developing a legal framework for participation can be applied and adapted to most situations (Lindsay, 2004).

- Ensure the law provides ways for local people to acquire genuine rights over local forest resources in appropriate situations (see section in this chapter on securing tenure rights).
- Clarify, secure and enforce the rights for participating groups.
- Ensure the law provides for local input into forest decision-making and resource allocation.

BOX 15

Multistakeholder involvement in forest law-making in Honduras and Ecuador

The draft of the new Honduran forest law is the product of an extensive multistakeholder dialogue begun in 1999 involving farmer trade unions, indigenous peoples, timber producer associations, professional forest associations, municipalities, academics, parliamentarians and other stakeholders, within the framework of the Honduran Forestry Agenda (AFH). This multistakeholder dialogue has reshaped the forest sector by increasing the participation and influence of civil society in forest-related decision-making processes. Around 1000 people from 138 organizations have participated in about 100 meetings to debate and build consensus on sustainable forestry in Honduras.

In Ecuador the first draft of the Norms for the Sustainable Forest Management for Timber Harvesting was prepared by a multistakeholder expert group. The norms were enacted in mid-2000 following an intense consultation process. They were later modified to better reflect the reality of forest dwellers through a process in which forest users and regulators participated actively. As a result in January 2001 and later in June 2004 new, improved and enriched versions of these norms were issued.

Sources: Wells *et al.,* 2004; Zapata, 2005; Thiel, 2004; H. Thiel, personal communication, 2005

- Establish easy and flexible ways by which people can form participatory forestry groups.
- Promote public participation and transparency in forestry decision-making at the national level (see Box 16).
- Ensure the law is realistic, easy to understand and well known by stakeholders.
- Develop flexibility in the legal framework in order to allow approaches appropriate for the local context.

BOX 16

A tripartite approach to participation in Ghana

The stock-taking workshop on African Forest Law Enforcement and Governance (AFLEG) held in March 2005 in Ghana used a tripartite approach involving government, civil society and the private sector. This was the first open and honest dialogue between the key stakeholders of the Ghana Forest Sector on corruption since the signing of the AFLEG declaration in Yaounde, 2003. A level playing field during the discussions was ensured through independent, third party facilitation.

The various participants voiced many concerns regarding forest law enforcement and governance in Ghana, including:

- the ineffectiveness of log-tracking measures;
- the failure of certification;
- the need for more capacity building and support;
- the need to analyse and streamline national laws;
- the need for wider participation in designing forest management plans;
- the need to ensure sanctions are enforced in cases of illegality;
- the need to clarify resource ownership and tenure.

Some concrete actions were suggested by the workshop participants to increase coordination among all interested parties, including:

- establishment of a quasi-independent advisory committee to provide information and advice on progress related to the implementation of the FLEG declaration;
- identification of tasks for various stakeholders that lead to action plans with measurable indicators for monitoring and evaluation purposes;
- multistakeholder collaboration;
- establishment of networks to share information.

A draft action plan, with priorities, roles and responsibilities was drawn up, which could be used as a blueprint for further actions. Providing space for tripartite engagement has proven to strengthen prospects for credible outcomes and their implementation through increased ownership of the processes and results for a wide range of actors.

Source: M.Laurie, IUCN, personal communication, 2005.

Ensuring transparency

Transparency is a key factor in reducing corruption and preventing the willful participation of government officials in illegal activities. In the forest sector, lack of transparency primarily affects the awarding and monitoring of concession contracts, decisions on procurement contracts, staff responsibilities and calculation and collection of fines for illegal activities. Consequently, transparency will be greatly improved through policy reforms related to the granting and monitoring of concessions and subsidies and to issues of accountability in forest administration.

Ensuring full and mandatory disclosure of documents of public interest concerning the forest sector will enable people to contribute directly to law enforcement by equipping them with a knowledge of which forest operations in their local area are legal, and who to talk to if they are not. These steps can improve law compliance by giving public credibility to the decisions and actions of the forest administration. The following information should therefore be in the public domain:

- all forest-related legislation and associated rules, regulations, decisions and decrees (Box 17);
- a forest inventory which shows how much forest there is, what type of forest it is, its location and a value assessment (see Chapter 6);
- a map based on the above studies showing forest use such as protection, community forests and commercial forests as well as concession maps with boundaries and current cutting coupes;
- concession and investment agreements, showing the social and environmental responsibilities of the title holders, and including the explicit right of forest control agents and independent forest monitors to inspect the forest/sawmill at any time;
- details of ownership of concession holders, permits for cutting, transportation licences, collection, export of forest products etc.;

BOX 17

Increasing transparency in the Bolivian forest administration

The Bolivian Forest Superintendence (Superintendencia Forestal), which is the governmental forest management monitoring body, is required by law to hold annual public hearings to report on its work and to provide an opportunity for the public to raise questions about its performance. Citizens can request copies of official documents. Likewise, the Ministry of Sustainable Development can only modify regulations under its jurisdiction (technical regulations) in consultation with interested parties through public hearings. Open auctions must govern the allocation of timber concessions and the sale of forest products seized from illegal operators.

Source: Pacheco, 2004

- the structure of forest departments and the contact details and roles of forest department personnel;
- a registry of business interests and familial links to the logging industry for all government officials;
- lists of companies that have been found to operate illegally (Box 18), including an explicit ban on participating in subsequent auctions or concession allocation processes.

These documents should, to the extent possible, be made available on the Internet, while printed copies should also be made available through the forest administrations.

Other specific best practices include:

- establishing clear roles and responsibilities of forest department personnel and the extent of staff authority (who can sign which documents, who is accountable for which decisions, etc.) as well as the role of other stakeholders;
- ensuring the process of appointing high officials in the forest administration follows clear and transparent rules (Box 19);
- establishing open and transparent bidding processes/competitions with well-publicized rules and conditions for the award of procurement contracts and concessions (Box 20) – which should include a report after the bidding on which lots were awarded to whom, how much was paid for them, and why some lots, if any, were not awarded;

BOX 18

Public disclosure of information about illegal activities in Cameroon

The Government of Cameroon has improved disclosure of information to forest stakeholders about illegal acts and has published several lists of companies that have committed illegal forest acts and been fined. An analysis of the published statements highlights the discrepancies between the total value of penalties levied and the proportion paid so far:

- a statement in August 2003 totalled US$6.2 million levied, of which US$1.3 million, or 21 percent, had been paid at that time;
- by April 2004 a total of US$7.2 million had been levied, of which US$1.4 million, or 20 percent, was reported as paid;
- in the most recent, October 2004 statement, a total of US$7.5 million had been levied, of which 37 percent was reported as paid.

This indicates that additional measures are needed to ensure the government's timely response to illegal acts and more transparency in the disclosure of such information.

Sources: Amariei, 2005; Global Witness, 2005a

BOX 19

Isolating the head of the forest administration from undue private interests and political influence in Bolivia

In Bolivia, the decisions of the head of the forest administration (*Superintendente Forestal*) were often guided by political pressure from the ruling party or by private interests channelled through the Minister, who had great discretionary powers to remove someone from his/her position. The new legal framework issued in 1996 dictates that the head of the forest administration be appointed by the President of the Republic, who must choose from a shortlist of three candidates proposed by Congress. Appointment is for six years, thus straddling the presidential five-year mandate. The head of the administration can only be removed after an open institutional procedure, which must prove either gross inefficiency or corruption. As a result, the first head of the forest administration to have been appointed under the new system held the position for several years, a drastic change from the revolving door appointments of the past. The administration was also able to attract more qualified candidates and to give more weight to the management of staff based on professional merit. However, the appointment of the new *Superintendente Forestal* was delayed because political parties were unable to reach an agreement about who should be appointed.

Source: Contreras-Hermosilla and Vargas Rios, 2002

BOX 20

More stringent and transparent rules for the allocation of concessions in Cambodia

The first concession right was issued in 1994 and within three years there were 33 concessions operating in near anarchy and covering nearly 7 million hectares of Cambodia's estimated 10.7 million hectare forest estate. In 2002, the government started to restructure the concession system and made the approval of concessions dependent upon more stringent rules, especially regarding environmental and social impacts and the sustainability of forest management applied in forest concessions. As a result of this process, of 33 concessions awarded initially, only six remained in the race for a final approval based on the updated requirements. Three years later however, these six companies have failed to provide adequate forest management plans and therefore there continues to be a full suspension of forest concession allocations in Cambodia.

Sources: Amariei, 2004; D. Young, Global Witness, 2005

- reducing the control of concessions by political elites through new legislation to prevent concessions and possibly the forest industry being held/controlled by politicians or senior forestry appointees, their family and nominees;
- initiating independent forest monitoring visits to strengthen official controls and audits. Inspections which are carried out by independent bodies with no vested interests in the audited party or the regulatory authority add significant public credibility to law enforcement and regulatory practices (see Box 21 and section on independent forest monitors in Chapter 5);
- organizing seminars, workshops and public hearings to provide information on forest-related rules and regulations to all interested parties (extension services to small and large operators, processing industry, traders, NGOs, etc.);
- ensuring transparency in the process of prosecuting key offenders – in many cases, even if apprehended, offenders with the means to influence the judiciary avoid prosecution (see also section on the role of the judiciary in Chapter 4).

Encouraging consistency of the regulatory framework

Consistency means that one legal provision should not directly contradict another. A forest law needs to be consistent internally and with other instruments (e.g. land tenure, public property administration, subsidies, infrastructure, trade regulations) used to achieve a relevant policy.

A forest law may contribute to policy convergence with other sectors, but it is too much to expect that a law alone will reconcile all policy conflicts and contradictions (Christy, 2004). An adequate architecture of the forest sector legal framework must therefore include a sound analysis of legal linkages (see section

BOX 21

Independent forest monitoring in Cameroon

Some of the measures adopted to tackle illegal acts in the Cameroon forest sector are related to how government institutions process information and make decisions with regards to the implementation of specific legislation. In this regard, the Cameroon government implemented some important changes relating to forest law enforcement, such as the creation of the Unité Centrale de Contrôle (Central Control Unit), bypassing the risk of influence from the forest administration and reporting directly to the Minister. The Unit is assisted by an independent observer, whose services have been established through a contractual agreement between the Government of Cameroon and Global Witness, an environmental NGO acting as watchdog since 2001 (pilot phase) to date. The contract is expected to continue for another three years.

Source: Amariei, 2005

on cross-sectoral linkages and collaboration in Chapter 4). Some countries, such as Honduras (Box 22) and Cambodia (Box 23) are progressing along these lines by dedicating considerable efforts to harmonizing forest-related legislation.

BOX 22

Harmonizing forest legislation in Honduras

The new draft forest law recently submitted to the Parliament of Honduras seeks to harmonize and consolidate in one single legal body all existing legislation governing the management of forests, protected areas and wildlife, including harvesting, conservation, protection, rehabilitation and development activities. This draft law explicitly aims to reduce much of the previous legal complexity and confusion that discouraged legality and good governance (such as the disparity of harvesting rates in management plans and in the state forest administration regulations). The new draft law is the result of a comprehensive review of the forest regulatory framework. It promotes institutional reforms to reduce the current deforestation rates and the numerous violations of forest regulations and to strengthen institutional capacities. It proposes the establishment of a new Ministry for Forests to help strengthen the forest administration, to foster the implementation of the forest law and to increase political commitment to sustainable forest management. The new institutional arrangement should also contribute to achieving the country's overall development goals.

Sources: Wells *et al.,* 2004; Zapata, 2005

BOX 23

Independent and holistic forest sector review in Cambodia

The review, commissioned by the Joint Coordinating Committee of Government and Donors in 2003, addressed a wide range of forest-related issues ranging from forest management to tenure issues, institutional arrangements and stakeholder involvement by using a holistic approach. Attempts were made to determine the importance of each issue within an overall policy framework rather than considering them as separate issues. The numerous and profound links to other sectors were taken into account, along with the broader picture of the democratization process in Cambodia. One of the conclusions of the review was that the concession system should be discontinued and that community forestry should be promoted. It also proposed partnership forestry based on a partnership between the state and municipalities (see Chapter 5 for more information on partnerships).

Source: Amariei, 2004.

MINIMIZING BUREAUCRACY, STREAMLINING LEGAL PROCEDURES AND SIMPLIFYING REGULATIONS

Decentralization

Decentralization can – if carried out under the right conditions – contribute to simplifying bureaucratic procedures. It can also lead to greater transparency in governance provided it is designed and implemented so that procedures and decisions are open to scrutiny and local officials are genuinely accountable to local populations. Many countries, including Bolivia and India, are empowering local authorities to make routine decisions in order to reduce the bureaucratic load forest operators face to obtain government permits and approvals (Box 24).

BOX 24

Decentralization of forest management authority in Bolivia

The 1996 Forestry Law transferred some power to regional and local administrations in line with the process of Popular Participation initiated in 1994. Regional administrations are now responsible for supervising public forest-related investments, formulating regional-level forest policies and developing technical capacity-building programmes. Municipalities assist the national forest agency (*Superintendencia Forestal*) in monitoring logging activities, complying with clear cutting permits and inspecting raw material supplies to sawmills located under their jurisdiction. In theory, these new forest-related tasks should be entirely financed with the revenues from concession and clear cutting fees allocated to regional and local administrations. In order to limit the risk of corruption at the regional and local levels, the decentralization process included giving local civil society organizations the power to elect oversight committees to monitor municipal finances. These mechanisms have had varied outcomes. In some cases, they have strengthened local participation, made municipal governments more democratic, increased municipal expenditures in the forest sector and expanded services to local forest users on forest management issues. In other cases, however, they have reinforced the power of local elites and contributed little to increasing the voice of marginalized people, with the forest sector remaining low on the municipal governments' list of priorities. The disparate responses mostly depend on the importance of forest resources in the municipal economy, the strength of community organizations and the political will of elected local authorities. Oversight committees have sometimes been co-opted by political parties; in other cases they actively exert their watchdog functions, especially when local community organizations are involved in local politics. Furthermore, the financial resources expected to be transferred to municipal governments to implement their new functions have shrunk over time due to the reduction of forest fees from which they receive a portion. Despite these problems, decentralization in Bolivia has greatly contributed to establishing more transparent and accountable decision-making processes in the forestry sector.

Source: Pacheco, 2004

Needless to say, the decentralization process must go hand in hand with capacity-building of decentralized institutions and sound funding of local government budgets for forest law implementation and enforcement (see Chapter 5 for more details). Decentralization is not a certain remedy for local corruption but may help in building more accountable and transparent decision-making in the forestry sector.

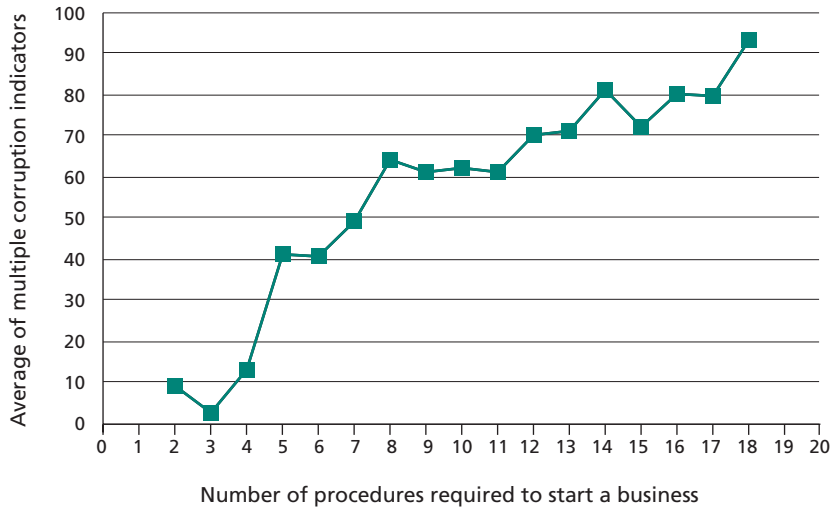
Simplifying and rationalizing forest regulations

Avoiding regulatory proliferation. Several of the case studies already referred to show that there is often a correlation between how numerous regulations are, and how big corruption and the "informal" (or illegal) economy are (see Figure 3). Developing countries tend to have an overabundance of regulations (World Bank, 2004). Regulatory proliferation is often an indicator of a weak policy framework which does not adequately address the long-term vision for the forestry sector. This multiplies the risk of legal inconsistencies, contradictions and overlapping jurisdictions and complicates the understanding of the regulatory regime affecting the sector. All of this in turn allows for more discretionary decisions and, therefore, increased opportunities for corruption.

The following guidelines may assist governments in limiting regulatory proliferation, overlaps and inconsistencies:

- Ensure that a coherent and sound forest policy is in place prior to law-making, in order to guide the formulation of legislation.

FIGURE 3
Relationship between number of procedures required to start a business and level of corruption



Source: Kaufmann, Kraay and Mastruzzi, 2003.

- Carry out a comprehensive legal analysis to identify opportunities for simplifying the legal framework.
- Reduce the number of rules in response to the legal analysis which will have identified overlaps and inconsistencies. Where an official decision or some other bureaucratic action called for in the law or regulations is not obviously and directly related to achieving a policy objective, it should be eliminated (Box 25).
- Adapt the remaining rules to ensure consistency with other existing laws, including among different departments and sectors (land tenure, forest, agriculture, wildlife management, environmental protection, rights of indigenous peoples, trade, etc.).
- Translate new legislative acts into working norms and regulations as soon as possible after new laws have been approved.

BOX 25

New Presidential Instruction to reduce contradictory regulation in Indonesia

A new Instruction issued in March 2005 includes provisions that begin to address the crucial problem of legally disputed district licensed timber felling units, which in 2002 comprised 45 percent of the intake of (and presumably, export from) Indonesia factories.

Provision 2.9(a) and 2.10(a) require governors and district heads, respectively, to "revoke and revise … decrees that are in contravention of legislation in the sector of forestry". This means that governors and district heads are required to repeal overarching provincial or district laws which contravene PP 34/2002. Thus, regional laws which allow provincial or district authorities to unilaterally issue timber concessions inside the national forest estate (without prior approval from the national level) must be immediately struck from the books, according to the new Presidential Instruction.

Provisions 2.9(c) and 2.10(c) of the Presidential Instruction also require provincial and district governments to "revoke issued business licences related to [timber concessions] that are in contravention of the prevailing legislation". That is to say, province- and district-issued timber concessions inside the national forest estate must be cancelled.

Finally, the Presidential Instruction requires provincial and district governments to "revoke business licences for wood processing industries using the illegal wood and deal with them according to their authority", this according to provisions 2.9(d) and 2.10(d). In plain terms, this means that according to the President, mills that consume illegal timber must be shut down by provincial and district authorities.

This new law appears to provide a powerful new tool for combating one of the major drivers of illegal logging in Indonesia, namely, provincial and district authorities who issue unsustainable, industrial scale, timber felling permits inside the national forest estate, purportedly on behalf of local people, although this is rarely the case.

Source: H. Speechly, DFID, personal communication, 2005; D.W. Brown, personal communication, 2005

It is worth noting that sometimes a complete review and redrafting of the entire forest legislation might be the best approach.

Simplifying forest regulations concerning management planning. Simplifying forest rules and regulations, including requirements for management plans for small holders, will greatly increase law compliance and reduce opportunities for discretionary decisions and subjective interpretations of the law by government officials and forest operators. Appropriate legislation supporting simpler forest management plans for small-scale or community-based forest operators has been developed in many countries including: Argentina, Bhutan, Bolivia, Brazil, Cameroon, Cambodia, Chile, Ecuador, Gambia, Guatemala, Indonesia, Kenya, the Lao People's Democratic Republic, Malawi, Mexico, Mozambique, Myanmar, Nepal, Paraguay, the Philippines, Senegal, the United Republic of Tanzania and Viet Nam (FAO, 2004a).

The use of simpler criteria and requirements for planning, harvest and resource assessments greatly facilitates compliance and eases enforcement and monitoring by forest guards (Boxes 26 and 27). However, forest extension services need to play a key role in this process as facilitators, communicators and technicians, assisting local communities and small-scale operators to develop their forest management capacity.

Rules and regulations can also be simplified for the system of concession and logging fees (Box 28).

SECURING FOREST LAND OWNERSHIP RIGHTS

Illegal forest operations are often the result of poor or non-existent control over resources. Security of tenure is therefore one of the most important mechanisms to ensure accountability and control of forestry operations at the local level. Tenure rights need to be supported by adequate capacity and an empowering legal framework.

In recent years, stronger tenure rights in forests for local people have been promoted for a number of reasons – most prominently as a way of improving local livelihoods and recognizing legitimate local claims to rights over land and resources, and as part of a general trend towards devolving or decentralizing various governance functions.

It is also increasingly recognized that unless local people have a significant stake in the management of local forest resources, the efforts of under-staffed and poorly financed forest officials to patrol and protect forests will often be futile. The absence of such a stake both reduces the incentives of local people to comply with the law, and prevents them from insisting on the compliance of outsiders, including government officials themselves.

Throughout history, national legislation has generally been unfriendly to local forest tenure rights. In many parts of the world, the overall trend has been an inexorable assertion of governments' legal control over forests at the expense of local practices and local perceptions. While local usage rights have frequently

BOX 26

Appropriate legislation in Gambia for small-scale forest operators

In Gambia, the Forest Bill (1998) defines the procedures and legal requirements for creation of community forests and designation of community controlled state forests. The accompanying Field Manual describes the simplified procedures for harvesting, resource assessment and management agreements, including the following.

Simple harvest guidelines

These are based on canopy cover percentage instead of an annual allowable cut for which an inventory would be needed. With canopy cover of less than 30 percent no live tree harvesting is allowed. If canopy cover is more than 30 percent and if the trees are non-valuable, species exploitation can take place providing canopy closure remains above 30 percent. For valuable species, exploitation is possible but has to follow a simple diameter limit for felling, regeneration and density of standing trees.

Resource assessment

Inventory is not required in the three-year and five-year management plans which the forest committees have to develop. This reduces the burdens that the forest committees have to bear in terms of labour, costs and technical skills. As an alternative, a map is required for forest management planning purposes and the existing forest resource is assessed through resource mapping based on participatory learning and action (PLA) exercises including transect walks and participatory mapping.

Management agreement

The Community Forest Management Agreement (CFMA) is developed through a two-tier process consisting of a preliminary Community Forest Management Agreement (PCFMA), followed by a five-year Community Forest Management Agreement (CFMA). Local forest management rules are recognized in forest management plans. The former is a three-year probation period before the official handover gives permanent ownership rights over forest resources and serves as a period for institution building; management planning; capacity building and confidence building of both parties (local forest committee and the forest department). Local by-laws are created as legal instruments for implementing simpler forest management plans. These by-laws can be oral and are endorsed in a flexible way.

Source: FAO, 2004a

been given some recognition, forest laws have provided little scope for local people to play a meaningful part in the planning, management and allocation of forest resources on which they may have depended for generations – and which, in numerous cases, they may have actively managed and protected on a *de facto*

BOX 27

Appropriate legislation supporting simpler forest management plans (FMPs)

- Decision-making is devolved, whereby the government allows local authorities to make by-laws regulating FMPs (Tanzania).
- Detailed forest inventories and silvicultural prescriptions are no longer legally required for FMPs. Instead a map may be sufficient, or a forest walk with a planning team, consisting of local forest managers and forest users (Gambia, Tanzania).
- Legal authorization is not required for domestic use of forests, while an FMP is an essential requirement for all types of commercial forestry activities. Making such a distinction can greatly simplify FMPs for communities (Bolivia).
- The "exception regimes" under government regulations state that small-forest owners (for areas of three-five hectares) do not require any management plans by law. A hand-drawn sketch and a list of trees, with their diameters and height, are sufficient (Bolivia, Guatemala).
- Plantation forestry and enrichment planting of areas under ten hectares, and pruning, thinning and coppicing of forests up to 50 hectares does not require an FMP (Argentina).
- Instead of FMPs, the use of forest resources is regulated through adherence to compulsory social and environmental standards. These standards can be developed by collective forest managers (countries such as India, Gambia, Tanzania).

Source: FAO, 2004a

basis, even though they have no *de jure* rights to do so. Frequently, the state has taken on the management role itself through the creation of state forests. In other contexts, national law may have left the tenure status of forest areas unclear, giving little or no legal protection to existing community-based systems and providing no alternative mechanisms through which local groups or individuals might assert effective control. Furthermore, given that state institutions are frequently ill-equipped or unmotivated to exercise the legal power they have assumed, the result is often an open-access situation. Recent legal changes have taken many forms, including the following (Lindsay *et al*., 2002).

- ***Recognizing community or indigenous groups' ownership or permanent tenure over forest land (Box 29).*** In recent years, some countries have accorded increasing recognition to the historical land or territorial claims of local peoples. The 1997 Indigenous Peoples' Rights Act from the Philippines is an example of this trend, and the rights of indigenous communities figure prominently in several Latin American laws. A number of other countries, including Canada, Australia, South Africa and several countries in central and eastern Europe, are engaged in restoring the lands of dispossessed

BOX 28

Streamlining concession and clear cutting fees in Bolivia

The 1996 Bolivian Forest Law established a single concession fee of US$1 per hectare per year. This is markedly different from previous complex norms, which set concession fees according to a wide range of criteria (quality of species harvested, volumes, log quality, etc.) and which left not only too much room for misinterpretation, misclassification and measurement errors, but also for tax evasion and corruption. The new rule limits possibilities of arbitrary interpretations, discretionary decisions or modifications of the fee. It also greatly facilitates the monitoring of compliance and prosecution of operators who do not pay the fee. Likewise, clear cutting fees are set in a clear and transparent way: US$15 per hectare plus the equivalent of 15 percent of the value of the timber logged. However, this law created a new set of problems and was heavily criticized by the private sector. Operators were required to pay fees on the basis of the size of their entire concession area, in contrast to other forest users (such as indigenous and small-scale loggers) who continued to pay fees based only on their annual harvested areas. The private sector argued that forest fees represented an important portion of the timber companies' operational costs, and in 2003 this system of taxation was amended to the annual harvested area for all forest users. The justifications for this change were to help some timber companies to overcome critical financial situations, and also to avoid unfair competition among different forest users.

Sources: Contreras-Hermosilla and Vargas, 2002, and P. Pacheco, personal communication, 2005

communities and individuals, some of which include natural forests or commercial plantations. In Gambia, permanent tenure for communities is secured after the participating communities successfully comply with an agreed management plan for a probation period. Recent forestry and land laws in Tanzania also envisage the possible creation of forests owned and registered in the name of villages.

- ***Transferring management of selected state forest areas to local user groups.*** The community forestry programme in Nepal is well-known for using this approach. A forest user group is formed by the people themselves. In consultation with the forest department, they develop a management plan. They are then entrusted with managing the forest according to the plan. Ownership of the land remains with the state, and the forest department has right of veto if management rules are transgressed, but the user group has the right to harvest and to benefit from all products set out in the management plan.
- ***Joint management or co-management of state forest land.*** This is a variant on the first approach, and differs from it only in that the role of the forest department in ongoing management is more clearly spelled out. Joint forest

BOX 29

Legal reforms to recognize community-based and indigenous property rights

In some countries governments have begun to shift towards community access and ownership in the last decade, partly in recognition of the legitimate claims of indigenous and other local communities and the limits of public forest governance. At least ten forest countries have implemented new legislation to strengthen indigenous ownership in this period. Approximately 57 percent of the legal rights over the some 380 million hectares now owned by, or reserved for, communities have been transferred in the last 15 years. For instance, in Bolivia, a legal reform implemented in 1996 recognizes that ancestral rights of community groups have precedence over forest concessions holders where these rights overlap. Subsequent laws have strengthened community rights. In Mozambique, titles for customary rights became available in 1997. In Tanzania, customary tenure has been given statutory protection (whether registered or not) since 1999. Indonesia established a new regulatory process in 2000 by which customary ownership can be recognized.

Source: White and Martin, 2002

management has been pioneered in India, in the form of agreements between forest departments and local groups, in which management responsibilities and benefits are shared according to different formula and conditions, and over time-frames that differ significantly from state to state. Various forms of co-management are found all over the world, from the Philippines to Canada (British Columbia), from South Africa to Mexico.

- ***Limited rights of access and use permitted in state-owned protected areas or buffer zones.*** This is not specifically a forest management model, but refers to the fact that in protected area legislation in many parts of the world (perhaps most notably in Latin America but also elsewhere), there are increasing examples of people being given limited access and use rights either in protected areas themselves or in the surrounding buffer zones.
- ***Leasing of state land for forestry purposes.*** This is an approach used in the Philippines, Nepal and a number of other countries, with the leaseholders either being individuals or local groups. This system is followed in China, where long-term leases and transferability of contracts have enabled the realization of most of the benefits of secure land tenure. This is often seen by governments as a means of replanting degraded land (e.g. in Viet Nam, Nepal, Sri Lanka, Uganda), although it may also be considered for productive, well-stocked forests.
- ***Community concessions.*** This option involves reforming public forest concession policy in order to encompass indigenous and other local communities. The Guatemalan government has piloted the granting of timber

concessions to local communities rather than large industries (Box 30). In the Lao Peoples Democratic Republic, the government has launched a similar participatory concession management pilot programme; early experience shows that the quality of management has improved, illegal activities have declined and royalty payments to the government have increased, although the share of income from forests destined for local people remains low.

It should be noted that the emergence of new legal techniques in a number of countries to support greater local tenure rights in forests has not always resulted in more robust rights in practice. Where legal frameworks have been reformed, the results have often been ambiguous, technically unsound, contradictory and/or not supported by enough political and social will to make a substantial difference on the ground. Where political, social, economic and ecological conditions are unfavourable for motivating and sustaining local management, a supportive legal framework may not make much difference. And of course, community members themselves are not inherently immune to temptations to engage in corrupt or destructive activities, and the strengthening of property rights or other stakes in forest management may not always be sufficient to dispel such temptations. Nonetheless, despite the mixed track record of community-based initiatives over the last decade or so, the underlying rationale for real local involvement remains persuasive and urgent.

ENSURING THAT IN-COUNTRY INDUSTRIAL CAPACITY DOES NOT EXCEED SUSTAINABLE SUPPLIES

The Cambodian and Indonesian experiences show that the expansion of the wood processing capacity well beyond the available national supplies of raw material provides an incentive for forest crime. In some cases, the option to obtain the shortfall from imports and thus abstain from buying illegal wood from local producers has been financially prohibitive, particularly for industrial production lines that require large wood volumes.

BOX 30

Community concessions in Guatemala

The Mayan Biosphere reserve is the largest area of natural forest in Guatemala. Encroachment and illegal logging have long been major threats. In 1998 the National Council of Protected Areas issued at least four forest management concessions to local communities that were supported by partner NGOs providing technical and administrative expertise. The concessions range from 7 000 to 55 000 hectares. Timber and non-timber resources are managed under a single plan. Satellite images recently revealed that illegal logging and the agricultural frontier have continued to expand in protected areas, while in the community concession areas logging has decreased.

Source: Ortiz, 2000

The following are a few examples of best practices that promote a balance between industrial demands and sustainable supplies from the country's forests.

- In most countries, big new industrial projects are required to undergo a feasibility study before they are granted approval by the relevant authorizing government agency. The feasibility study should include an analysis of how the industrial plants will be supplied with wood. In all likelihood, this will entail careful analyses on a project-by-project basis. In the case of the wood processing industry, estimates of the raw material demand are usually already available for plants of different sizes and the potential supply can be estimated if approximate forest inventories are available (see Chapter 6 for more information on the importance of forest inventories). It is important to include these studies as a condition for government approval of new industrial installations as well as for substantial expansions of already established industries;
- Where industrial capacity regularly outstrips supply, the closure of mills should be considered, especially those found to be operating illegally. Supply auditing can be used to identify mills potentially processing illegal timber. Progress with such strategies is dependent on measures to strengthen law enforcement capacity and raise levels of accountability and transparency (Box 31);
- International agreements among trading partners and other measures, such as public procurement policies and legislation against illegal trade, may provide incentives for reducing overcapacity and illegal exports (including legal exports based on illegally sourced wood). The limitations of such approaches include exporters increasingly targeting less discriminating markets and their lack of impact on domestic wood demand (see Annex 3 for more information on multilateral and bilateral agreements).

IMPROVING CROSS-SECTORAL LINKAGES AND COLLABORATION

The impacts of policy and legislation in related sectors such as transport, mining, agriculture and energy can have a profound effect on forests, forest management, illegal activities in the forest sector and the livelihoods of forest-dependent people. A better understanding of the linkages between different sectors and a coherent and overarching approach to forest issues can help reduce uncertainty, maximize synergies and minimize the occurrence of illegal practices in the forest sector. Three levels of coordination may be defined (FAO, 2003):

- intersectoral (or horizontal) coordination, when problems are considered mainly at the same territorial level by actors operating in different sectors (for instance forest and agriculture);
- intrasectoral (or vertical) coordination, when coordination is based mainly on interaction among actors operating at different levels but in the same sector (for instance national and local forest administrations);
- multilevel cross-sectoral coordination, linking international and national efforts.

BOX 31

Industrial restructuring working group in Indonesia

In 2001, Indonesia's Ministry of Forestry, responding to the over-capacity of its forest processing industry, created an industrial restructuring working group (IRWG), including representatives from donor agencies, the timber industry and an international research institute.

The group used estimates of the total industrial wood demand and compared the figures with the availability of domestic wood supplies. As expected, this exercise revealed a wide gap between demand and supply levels. The estimated deficit of raw material stimulated proposals to stop further expansion of the wood processing capacity and close down plants operating illegally.

In 2002, the IRWG developed a set of protocols to investigate the origins of timber in large mills. At the time, the government was committed to reducing the processing capacity of the timber industry and to closing down mills operating illegally. In 2003, the protocols were used by an independent team sponsored by the United Kingdom Department for International Development's Multistakeholder Forestry Programme (MFP), to investigate a large mill in East Java. The Indonesian Ministry of Forestry also used the protocols to investigate seven other large mills. Although the Ministry of Forestry has only made three mill inspections since June 2003, other organizations have begun to use its protocols. For example, the protocols are now being used by the Tropical Forest Trust and WWF Indonesia to identify mills operating illegally. The British industry is purchasing raw material from the mills which, thanks to the protocols, have been identified as acting most within the law. The Ministry of Forestry protocols have also been put to other uses. They have, for instance, had an influence on the definition of legality that is currently being developed under the Indonesia–United Kingdom Memorandum of Understanding on Illegal Logging (see Annex 3 for more details).

Source: Richards, 2004; D.W.Brown, DFID, personal communication, 2005

Strong political will and commitment to better interagency cooperation is needed in order to increase successful cooperation among various levels of governments. For instance, in Ecuador, the decision to establish a system of law enforcement involving the police and the military, along with other government agencies, the private sector and civil society was feasible only thanks to strong political commitment at the highest levels. The following best practices facilitate intersectoral coordination:

- promoting overall policy consistency between policies in different sectors (mining, agriculture, forestry, etc);
- encouraging legal consistency between the forest legislation and laws governing other key sectors with potential adverse effect on forests, such as

road expansion, infrastructure development, agricultural intensification, and mining and oil exploration/exploitation;
- identifying and eliminating perverse fiscal or monetary incentives including direct and indirect subsidies for activities in related sectors with a negative impact on the forest sector;
- introducing safeguards in the design of these related policies to diminish the potentially negative impacts on forest and forest-dependent communities;
- providing decision-makers in the forest sector with evidence of potential cross-sectoral effects and enabling them to enter into a cross-sectoral dialogue;
- improving knowledge about ways to address cross-sectoral issues in a comprehensive manner;
- encouraging exchange of forest-related information and knowledge in a transparent and timely way on policies, emerging issues and plans among various governmental institutions;
- monitoring progress and responding proactively to policy and legislation initiatives which might affect forests in other sectors;
- supporting cross-sectoral scientific policy analysis;
- strengthening institutions and promoting the involvement of forest-sector stakeholders and civil society.

INCREASING THE COMPETITIVENESS OF LEGAL OPERATIONS

One of the root causes of organized illegal activity in the forest sector is the profitability of forest crime compared to legal logging and associated legal trade. For example, illegal loggers do not pay taxes or fees for the standing wood, do not bear forest management and post-harvest operation costs and do not have to dedicate efforts, money and time to comply with bureaucratic requirements. Furthermore, illegal loggers often focus on the most valuable species of wood, further boosting the profitability of illegal logging. With higher profits, a low chance of detection and negligible penalties, illegal activities have a strong financial appeal.

Decreasing the profitability of illegal operations

Detecting and penalizing illegal activities through the following actions will limit the financial appeal of breaking the law.

- Improving monitoring systems increases the risk of detection and facilitates prosecution. (See Chapter 6 for more details on monitoring and detection techniques.)
- Involving local populations in forest management by providing access or tenure rights promotes increased local control of the forest resource.
- The market should be closed to products whose legal origin cannot be proved. (See Annex 3 for examples of international initiatives and bilateral agreements.)
- Sanctions should be greatly increased and should be imposed for all detected illegal activities. It is necessary to ensure that offenders are systematically

convicted. Sanctions can be monetary (confiscation of assets, fines and penalties, etc.) or non-monetary (restrictions on future activities, revocation of operating licences, imprisonment, community service, etc.) (Whiteman, 2003). However, it is important to note that increasing the fines and penalties for illegal activities might increase the producer's willingness to pay bribes and may also lead to greater corruption. Stiffer penalties will thus only act as a deterrent where overall governance of the forest sector is improved.

- Judiciary procedures should be streamlined and forestry staff given increased power to confiscate illegal timber and equipment.
- Financial penalties should be indexed to inflation rates in order to keep their deterrent power over time. Various indexing systems exist. For example, fines can be expressed as a multiplier of the minimum wage or other stable value indicator, as is the case in Mexico and Peru, or in terms of a stable foreign currency (Christy, 2004; Sociedad Peruana de Derecho Ambiental, 2003).
- It is important to identify and define all possible offences and ensure appropriate penalties for the complete array of offences. For example, it is not enough to state that all operations should be carried out according to an approved management plan, as this does not distinguish between the lack of a management plan, an inadequate plan, and plain failure to follow the plan.
- Recurring offenders should face harsher penalties. For example, repeated breaches of the law can lead to blacklisting of companies by government and effectively excluding them from operating on public forest lands. For the most serious offenders, prison sentences should also be included in the regulatory framework.

Increasing the profitability of legal operations

Some of the tools that can be used to increase the profitability and competitiveness of legal operations include:

- giving preferential treatment to operators who have proven the legality of their operations when awarding concessions;
- establishing government procurement practices that favour forest products of proven legal origin;
- requiring the forest administration to carry out open and transparent judicial processes as a condition for the cancellation of concessions, to protect legal operators from the arbitrary cancellation of concession contracts (in any case, cancellation should be subject to a clear legal process to avoid creating strong disincentives to participate in the official concession system);
- providing financial incentives for sustainable forest management as a way to reduce the profitability gap between illegal operations and sustainable forest management activities prescribed by the law (Box 32);
- a reduction of taxes (stumpage fees) on legally harvested timber if incentives cannot be provided;
- simplifying procedures for obtaining harvesting permits;

BOX 32

New financial incentives for sustainable forest management in Peru

A new forest regulation, which is being implemented through a resolution of the Ministry of Agriculture, National Institute of Natural Resources (INRENA), stipulates a reduction of the fees paid by concession holders who commit themselves to more sustainable forest production. A 25 percent reduction of the concession fee is granted to those concessions that integrate harvesting, transformation and processing in the concession area. An additional 25 percent reduction is given to concessions with voluntary forest certification and up to 25 percent more for setting aside high value forest areas within the concession boundaries for conservation purposes.

In addition, the new Fund for the Promotion of Forestry Development (Fondebosque) has been designed to finance private forestry sector projects, promote reforestation and sustainable forest management, capacity building, research projects and projects to control illegal logging and conserve threatened species.

Source: Sociedad Peruana de Derecho Ambiental, 2003

- designing and providing technical assistance programmes (see Chapter 5) to assist forest operators with the design of forest management plans, tax incentives or other tools such as cost-sharing agreements, in order to encourage forest operators to follow legal guidelines.

ENHANCING THE CAPACITY OF THE JUDICIARY TO ACT EFFECTIVELY ON FORESTRY LAW MATTERS

Effective implementation of forestry laws requires a reasonably functioning judiciary, both to hold law-breakers accountable for their actions and to protect the legal rights of various stakeholders. However, the reality in many countries is that courts function poorly for a variety of reasons. They are often understaffed and underfinanced, and face caseloads that greatly exceed their financial and human capacity to cope efficiently. The training of judges, particularly at the level of courts that deal with typical forest-related cases, may be weak in general and will usually not involve any specific training in forestry laws. The lack of separation of the judiciary function of the state from executive and legislative branches is a common problem in some countries, leading to widespread interference in the affairs of the judiciary and corruption at all levels, including in the forest sector.

Achieving judicial independence in order to ensure impartiality in judicial decisions is a complex undertaking. There are various ways in which countries have sought to attain this goal and the following general guidelines can assist in such a process (United States Agency for International Development [USAID] 2002):

- build broad support for reforms;

- promote independent organizational and structural arrangements for the judiciary;
- clarify the relationship of the judiciary to the rest of the government;
- improve terms and conditions and training of individual judges;
- ensure transparent procedures;
- promote accountability of the courts to the public (Box 33).

It should be recognized, of course, that broad reforms to the judicial system are well beyond the mandate of forestry governance institutions to initiate or lead, though they can be effective lobbyists and supporters for such a process. In any case, there are other forestry-specific interventions that can be helpful. One is to target the often weak knowledge and appreciation of forestry law issues among the judiciary through professional training programmes. FAO has been supporting this type of strategy in Mozambique through a programme of training in forestry and related natural resource laws for rural resource managers and their advocates, judges, lawyers and administrators, and non-governmental organizations. For most of the district judges, this is the first formal instruction in these laws that they have received. With the skills developed during these courses, judges are much better equipped to deal consistently and professionally with forest-related cases that come before them (Box 34).

Another option, which would enhance the capacity of the judiciary in forest issues, is to make public and include in concession contracts the mechanisms by which fines are calculated and then to transparently apply the formula (see section in this chapter on increasing the competitiveness of legal operations). This would largely eliminate the discretionary power of the forest authority in assessing fines, and would significantly reduce the number of cases which cannot be resolved through a straightforward administrative process and actually need a judge.

BOX 33

Public monitoring of the judiciary in Indonesia

Public monitoring of the judiciary process is important to improve forest law compliance. An important recent development has been the establishment of watchdog groups to monitor the judiciary process in West Kalimantan and Jikalahari. These groups are composed of voluntary NGO and government representatives, and have come together following commitments made at multiple stakeholder consultations on forest crime. However, these fledgling organizations lack financial resources and expertise, and rely on voluntary staffing, so their sustainability is doubtful. Under the Indonesia-United Kingdom Memorandum of Understanding (see Box 42), NGOs in West Kalimantan will receive support for monitoring cases against illegal logging offenders.

Source: Richards, 2004; H. Speechly, DFID, personal communication, 2005

BOX 34

Capacity building of the judiciary in Mozambique

An FAO-supported project is conducted through the Centre for Legal and Judicial Training (CFJJ) in Mozambique in order to promote the effective implementation of new laws related to land and natural resource management. The activities fall into four clusters.

Training of District Judges

The CFJJ and national legal experts have designed a training methodology and prepared training manuals covering each of the three new laws on Land (1997), Environment (1997) and Forestry and Wildlife (1999). Over a three-year period, a total of ten two-week training courses were organized with participation of around 85 percent of Mozambique's over 200 District Judges. Training manuals were published and distributed to law schools. In addition to providing judges with information on the legal principles and details of the new laws, the courses have aimed to provide a greater understanding of the social, economic and environmental issues that lie behind the law reforms.

Production of legal reference books on each of the three subject areas

In addition to the training manuals, three in-depth legal reference books or interpretative guides/treatises were produced and distributed to the judiciary, legal professionals, law students and legal academics.

Study tour to Brazil and return visit of Brazilian experts to Mozambique

Members of the Mozambique Supreme Court travelled to Brazil to learn from the Brazilian experiences in legal education, special courts, judicial restructuring and adjudication of land and environmental issues. Following this study tour, judicial specialists from Brazil travelled to Mozambique to assess the court system and possible methods for strengthening the Mozambique procedures in addressing land and environmental cases.

Enhanced understanding of the role and training needs of community-level institutions

Socio-legal field research into the role and functioning of community tribunals and other community-based institutions was conducted in order to assess their relationship to the formal judiciary and their training needs regarding land, environmental, forestry and wildlife law issues. A research capacity is being established at the CFJJ focusing on land and natural resources issues to monitor and assess the performance of tribunals in these areas, and the relationships between communities and the state at local level.

Source: FAO, 2004b

CONCLUSIONS

A number of steps can be taken in order to streamline and rationalize forest policies and laws, including to:

- Assess underlying social, economic, cultural and political causes of non-compliance and modify the policy and legal framework governing the forest sector accordingly.
- Analyse the impact of the forest policy and legal framework on the livelihoods of the poor.
- Increase clarity, transparency and consistency of forest and forest-related legislation, by drafting legislation that is simple, unambiguous, based on tested approaches and containing transparency obligations and minimal discretionary powers.
- Ensure a participatory approach to forest law design in order to promote transparency, reduce the potential for corruption, enable people to scrutinize the effectiveness of subsequent implementation, help ensure greater equity and minimize the influence of privileged groups.
- Encourage consistency of the regulatory framework to ensure that laws do not contradict each other (within the forest legal framework and with laws in other sectors).
- Minimize bureaucracy, streamline legal procedures and simplify regulations, for instance, through decentralization, avoiding regulatory proliferation and simplifying forest regulations on management planning.
- Secure forest land ownership rights in order to ensure accountability and control of forestry operations at the local level.
- Ensure that in-country industrial capacity does not exceed sustainable supplies, for instance, by conducting feasibility studies before new mills are built, closing down mills and facilitating timber imports.
- Establish international or bilateral trade agreements with trading partners.
- Ensure cross-sectoral linkages and collaboration to ensure a coherent and overarching approach to forest issues (though for instance national forest programmes).

- Increase the competitiveness of legal operations by decreasing the profitability of illegal operations and increasing the profitability of legal operations.
- Promote the independence of the judiciary and transparency of judicial processes.

5. Building institutional capacity for law compliance

Establishing the right balance between legal requirements and the ability of governmental institutions to enforce the law is a key consideration, especially with the shrinking governmental powers and weak forest administrations observed in many countries (Christy, 2004). Capacity building may need to precede the legislative reforms described in the previous chapter, as amending laws is time- and resource-consuming and requires a wide range of stakeholders to agree.

The World Bank, in cooperation with the World Wide Fund for Nature (WWF), has developed a list of priorities for increasing the capacity to detect and suppress forest crime in producer countries (see Box 35). However, increasing the efficiency of the public forest administration requires a great deal more resources than are presently available in most countries. The following relatively low-cost options are therefore explored in this chapter:

- focus and prioritize the law enforcement efforts of the public forest administration;
- increase the operational capacity to detect and suppress forest crimes;

BOX 35

World Bank and World Wide Fund for Nature's priorities for tackling forest crime in Indonesia

The WB/WWF multiple stakeholder process identifies the following priorities for increasing the capacity to detect and suppress forest crime:

- training of civil society and law enforcers in detection and reporting, and of law enforcers in putting together a comprehensive case for prosecution;
- further development of the forest crime reporting and monitoring system;
- focusing on key forest criminals rather than those visible in the field (while recognizing that it can be difficult and dangerous to bring ringleaders to justice);
- focusing on enforcing financial and administrative regulations, such as submitting annual reports and paying taxes, again targeting key offenders. It is often legally simpler and less dangerous to investigate and prosecute such infractions than illegal logging;
- removal of geographical restrictions on law enforcement bodies.

Source: World Bank/WWF Alliance, 2005

- promote better interagency linkages;
- develop public/private partnerships for forest law enforcement;
- access international support and technical assistance programmes.

Giving local people the tools to observe, report on and judge whether local forest operations are within the law or not, through policies on transparency and participation (as described in Chapter 4) is another low-cost and irreversible way of requiring forest administrations to be more effective.

INCREASING PUBLIC FOREST ADMINISTRATION FOCUS

Limited government resources, as well as the magnitude and complexity of the issue of law compliance in the forest sector, make it imperative for the government to strategize, prioritize and focus its actions (Scherr, White and Kaimowitz, 2004). Although the priority actions will depend on the national context, the following points give indications on how to make the most out of existing resources.

Increased focus on certain key actions

The following are specific examples of governments giving priority to one or more actions to improve forest law compliance:

- controlling wood exports at ports and other international transit points (e.g. Peru's system to monitor forest products flows at key transit points [ITTO, 2004]);
- controlling transportation of wood products through road or river checkpoints (e.g. Mozambique, see Box 55 in Chapter 6);
- rationalizing the concession system (e.g. Bolivia, see Box 28 in Chapter 4);
- establishing bilateral agreements with trading partners (e.g. Indonesia, see Box 46 in Chapter 5);
- concentrating on key competences for the exercise of forest authority (policies, norms and enforcement) by delegating subsidiary activities to specialized entities (e.g. Ecuador, see Box 14 in Chapter 4).

Increased focus on certain regions or localities

Governments can concentrate actions on a few regions of the country, for example where local governments have a greater capacity to detect illegalities and enforce the law and/or where illegalities are strongly suspected. Focusing on areas threatened with the construction of new roads in currently inaccessible forest lands may be more cost effective than focusing on areas presently under intense population and economic pressure, where solutions may be extremely expensive and the chances of success are slim.

Increased focus on a few agents

Focusing on key forest criminals and companies with a bad track record will bring longer-lasting results than punishing communities that may be administering their forests in sustainable ways but technically operating illegally because they are unable to submit and secure government approval of local forest management

plans. A few highly publicized success stories of forest law enforcement can serve as effective deterrents to illegal acts. They will also show others that the government is serious about prosecuting illegal acts in forestry (Box 18).

However, in order to remain credible in the public eye, control agents need to be transparent in the decisions they make about where to go and who to check. For example, in Cameroon, the control agents have shifted the focus away from targeted investigations, as industry might become suspicious of activities singling out particular companies for no good reasons, and towards more systematic inspections of all concessions and other titles over time. An alternative approach might be to clearly lay out criteria for deciding which suspicious cases/actors to follow up on (Global Witness, 2005a and 2005b).

INCREASING OPERATIONAL CAPACITY TO DETECT AND SUPPRESS FOREST CRIME

Enforcement bodies often lack the staff, infrastructure, equipment and money to effectively regulate forest resource use. Poor management skills and weak monitoring procedures and accountability structures are also hindering progress towards better law enforcement in the forest sector. Field staff may have to rely on logging operators themselves for assistance with inspection processes. An inadequate number of often underpaid government officers with insufficient resources are expected to monitor and impose the law in immense areas.

Establishing effective monitoring and law enforcement bodies

Some of the measures which can be adopted to tackle forest crime are related to how government institutions process information and make decisions about the implementation of specific legislation. Sometimes, the restructuring or creation of new institutional bodies might help fill gaps in the forest governance system (Box 21 in Chapter 4 and Box 36).

Increasing staff number and improving staff performance

Wherever possible, the number of staff assigned to forest crime detection should be increased. Where this is not feasible due to resource limitations, improving the terms and conditions of the existing forestry officials may reduce corruption. Better-paid staff would have less incentive to accept bribes and more to lose from suspension or dismissal. However, it may be more cost effective to increase the supervision of staff and raise the probability of finding and dismissing staff colluding in illegal activities. Incentives such as rewards for contributing to the apprehension of those involved in illegal activities are likely to improve staff performance more than general improvements in terms and conditions of employment (Whiteman, 2003). Such incentives should be combined with other measures to foster the commitment of forestry officials to forest law enforcement, such as promoting team spirit and enhancing loyalty.

Training of forestry officials and staff is also needed to provide them with a better understanding of the regulatory framework and increased knowledge of

the techniques and mechanisms for effective monitoring and reporting of illegal activities (Box 37). For example, in Costa Rica forestry administration officials are currently being trained to use GIS and GPS to help detect the illegal conversion of forests to pasture lands, as part of a comprehensive strategy to combat illegal logging (see also Box 9 in Chapter 3).

Altering staff incentive structures

As long as the probability of being caught and disciplined for accepting bribes is negligible, forestry officials have little to lose from corruption. Thus, increasing the monitoring and supervision of field staff is crucial. If the probability of being caught and disciplined increases, the minimum amount acceptable as a bribe will also increase. If this minimum amount rises above a certain level, corruption will disappear because the producers' maximum willingness to pay will be less than the forestry official's minimum willingness to accept a bribe (Box 37).

However, very high levels of staff supervision may be costly and affect staff morale. Another way to change the attitude of forestry officials is to allow them to retain a proportion of the fines or penalties from offences (Boxes 38 and 39).

BOX 36

Restructuring the forestry administration in Cambodia

In September 2003, the former Department of Forestry and Wildlife (DFW) was renamed and restructured as the Forestry Administration (FA). While responding broadly to the overall restructuring needs of the Ministry for Agriculture, Forestry and Fisheries (MAFF), the reasons for restructuring the administration of the forestry sector included specific aspects that related to legal compliance, such as the anecdotal evidence of widespread illegal payments to supplement salaries and operational budgets, and the evidence of the adverse influence of various interest groups, including the military, in the workings of the Administration. Additional institutional-level changes to improve governance and legal compliance include the founding of a Community Forestry Unit within the MAFF, followed by its evolution into a separate office during the restructuring that led to the founding of the new FA.

An additional step which was intended to improve the governance of the forestry sector and, indirectly, legal compliance, was the creation of the Ministry of Environment (MoE) to protect Cambodia's resources and advise other relevant ministries on the conservation, development and management of natural resources. However, ongoing conflicts with MAFF over jurisdictional control of protected areas (a problem with roots in the incomplete legal framework for environmental protection) and a limited operational capability have led some to question how effectively MoE will be able to deliver on its mandate.

Source: Amariei, 2004

BOX 37

Staff performance and integrity in the forest sector

Increased monitoring and control of forest operations can reduce illegal activities considerably, as long as the problem of corruption is also tackled. Increasing the fines and penalties for illegal activities in some circumstances (for example, in cases where there is little or no risk of being caught) may just increase the producer's willingness to pay bribes, leading to greater corruption. Improving the terms and conditions of forestry officials may reduce corruption by increasing the expected costs of any disciplinary action (better-paid staff would expect to lose more from suspension or dismissal). However, it may be more cost effective to increase the supervision of staff and introduce incentives for reporting illegal activities.

The above conclusions suggest that paying closer attention to and rewarding the honesty of forestry staff may yield higher returns than increased monitoring and punishment of illegal producers. Many countries have a poor record in this respect and the self-regulation of forestry institutions may not be very successful. Civil society has a very important role to play in this process and mechanisms should be developed to encourage effective monitoring and reporting of illegal activities without fear of reprisal or coercion.

Source: Whiteman, 2003

BOX 38

Improving agency performance through staff training in Brazil

The Fundação Estadual do Meio Ambiente (FEMA), the state environmental protection agency in the Mato Grosso State, Brazil, initiated a new system in 1999 to detect illegal clearings and prosecute offenders that involved restructuring and hiring new staff. FEMA trains its field inspectors to identify and report environmental crimes. Their training includes topics such as the use of GPS and satellite imagery analysis. They are also trained to adopt a positive and respectful attitude with landowners in order to avoid unnecessary conflicts. FEMA accredits and trains service providers in the area of environmental licensing. Professionals who fail to comply with the FEMA criteria (for example by providing false information or failing to provide monitoring reports) are penalized: they automatically lose accreditation and may even be held jointly accountable for environmental damages from the activities carried out. The registry of service providers is available for public access.

Source: State Government of Mato Grosso and State Foundation of the Environment (FEMA), 2001

BOX 39

Distribution of revenue obtained from fines in Niger

Decree 88-385/BOM/MF of 15 September 1988 sets out the distribution of revenue obtained from fines, transactions, damages and sales of confiscated wood in Niger. This distribution is defined as follows:

- Public Treasury: 75 percent;
- Water and Forest Service personnel: 25 percent.

The 25 percent of revenue allocated to Water and Forest Service personnel is intended to encourage them to take care of the ecosystem and to avoid any misappropriation of funds. This is divided between the different staff members in the forest administration, with the largest shares going to workers that report an offence (40 percent of the revenue) and to the local forestry service personnel (16 percent of the revenue). As of 2005, this money is still being collected and distributed to staff involved in apprehending offenders.

Source: FAO, 2001a; A. Whiteman, personal communication, 2005

Establishing a *Regencia forestal* system

The *Regencia forestal* system was first established in Costa Rica in the mid-1990s, and later adopted by Ecuador, Mexico and other countries (Box 40). The system is based on the devolution of the state's forest-monitoring functions at the forest management unit level to private foresters (*regentes*) under a contract. These professional foresters accomplish a series of administrative and control tasks on behalf of the state to relieve the public forest administration from tasks it does not have the capacity to carry out. The forest *regentes* are legally responsible for managing the forests they are in charge of. If there is proof of illegal acts on this land, they lose their licence and can be legally prosecuted. The functions carried out by the *regente* can include:

- monitoring and providing professional and technical advice (on the basis of a forest inspection) on the planning and implementation of integrated management plans and harvesting programmes before granting a forest harvesting licence;
- monitoring, through follow-up field visits, the implementation of such plans and programmes;
- issuing transportation tags authorizing timber removal and transportation at the collection points.

IMPROVING INTERAGENCY LINKAGES

As mentioned in Chapter 4, interagency cooperation is essential to the success of the chain of enforcement. When such cooperation has been achieved, with key agencies operating as a system along the chain of enforcement, overall performance has been greatly enhanced. In Ecuador, for example, the government

BOX 40

Establishment of *Regencia forestal* in Ecuador

The *Regencia forestal* system was established in Ecuador in 2000 through the enactment of the forest normative, which was modified in 2004. In order to become a forest *regente* for the Ministry of Environment, the professional forester needs to meet the following requirements:

- hold a university degree in forestry and be a member of a professional association of foresters;
- take and pass a course on *Regencia forestal*;
- sign a legal declaration committing him/her to accomplishing his/her duty and watch over the compliance of legal and regulatory frameworks governing the forestry sector.

If a *regente* is suspected of having committed any irregularity a sanctioning committee is summoned by the National Forestry Director in which a representative of the environmental NGOs, one from the timber industry and one from the National Association of Professional Foresters have one vote each.

Regentes provide official certificates in forestry matters and can be contracted by those who need their services, thus their salary is decided directly with the user. They are not civil servants and do not receive any compensation from the state. The *regentes* are responsible for supervising reports (preliminary inspection, implementation, and final inspection) or to report any violation on behalf of the Ministry of Environment, which can then proceed to enact its authority in the forest domain. By the beginning of 2003 the Ministry of Environment had taught 25 training courses to 433 professional foresters who were interested in becoming *regentes* or who wanted to have a deeper insight about the normative reform and the new forest management tools. Of these, 59 successfully passed the *regente* test and received delegated authority from the Ministry of Environment.

Source: Thiel, 2004

has made a substantial effort to contract out the implementation of an integrated computerized control system (SNTCF) to improve cooperation, operational linkages and cross-checks between actors involved in controlling illegal logging (Vigilancia Verde road checkpoints; *Regentes forestales*, SGS and Ministry of Environment forest administration, licensing and verification services). As a result the volume of illegal timber seized grew exponentially (Thiel, 2004).

Experience shows that training of staff is also important in improving interagency cooperation. To establish proper communications with law enforcement agencies, forestry officers need training in functions that facilitate the prompt prosecution of law offenders. For example, they need to be trained on the procedures to be followed for the collection of solid and legally admissible evidence. Judges are

seldom knowledgeable of the issues involved in law enforcement in the forestry sector and their training in this subject is also likely to facilitate more intensive collaboration with the public forest administration.

PUBLIC-PRIVATE PARTNERSHIPS IN FOREST LAW ENFORCEMENT

Establishing partnerships between the public forest administration and civil society or the private sector to monitor law compliance in the forest sector will directly or indirectly limit the capricious or arbitrary use of discretionary power and tend to increase transparency.

Delegate enforcement and/or monitoring authority to appropriate actors

The case studies considered here show that government agencies often have critical limitations on their abilities to impose the rule of law. Responsibilities assigned to government institutions often bear little relationship to their ability to fulfill them. Law enforcement requires technical and financial capacity. When capacity is lacking, it may be possible for governments to delegate or subcontract some of the law enforcement tasks and responsibilities to other, specialized non-governmental institutions. Collaborative arrangements that take advantage of relative strengths have proved useful in various countries (Ecuador, Brazil, the Philippines, Cameroon, Cambodia) and in various functions such as monitoring, ensuring transparency of operations and accountability (Box 41).

BOX 41

Examples of successful partnerships to promote forest law enforcement

Vigilancia Verde (Green Surveillance) was created in Ecuador in 2000 by a coalition involving the National Police, the National Defence Ministry, the Ministry of Environment and five NGOs. *Vigilancia Verde* is a supervising body responsible for controlling the transport of timber between the forest and processing and marketing locations. Thirteen fixed road checkpoints and seven mobile control points are being established, each one of them formed by a representative from the forest authority, one from civil society and two from the police. These teams operate on a 24-hour basis and their members are periodically reassigned to other control points. The system is funded by a trust that receives 50 percent of the sale value of the timber that is detected, confiscated and auctioned. The funds are administered by a bank and managed by three directors from civil society and two from government agencies. All of these features have been designed to avoid unaccountable practices, and to reduce the temptation of corrupt deals. This scheme has already demonstrated its effectiveness: in its first year the volume of timber seized was nearly 600 percent more than that seized by the government during the previous year (Contreras-Hermosilla and Vargas Rios, 2002; *The Economist*, 2003) and when

a computerized link was created for the whole chain, the possibility to track licence compliance online resulted in twice the volume of illegal timber being retained.

In 1994, the Philippines Department of Natural Resources (DENR) created 16 Multisectoral Forest Protection Committees (MFPC) in areas where illegal logging was most acute. These committees included representatives from the DENR, the local government, the media, the church, the police, the military and various NGOs. The committee served as an information centre and discussion group for DENR monitoring and enforcement duties and as a mechanism to obtain information from members' informal networks. In 1999, the number of committees had expanded to 400 with a national federation and regional, provincial and municipal level MFPCs. The committees have been effective in raising awareness and mobilizing public support. They provide a trusted and secure vehicle for "whistleblowers" and have encouraged the organization of other popular groups with similar duties and responsibilities. The groups have contributed to the confiscation of large volumes of illegal wood, the dismantling of small illegal sawmills, the closure of large sawmills and the arrest and prosecution of large-scale illegal loggers. Of 360 cases filed, 285 have resulted in convictions, some of them involving important operators (Embido, 2001). MFPCs are still operational, though with much reduced coverage. The end of the World Bank funding cut off much of the financial support, which had been channelled through the DENR. The continued functioning of MFPCs now depends on the presence of motivated individuals and NGOs working on a voluntary basis. This makes them rather vulnerable to capture by sectional interests (Brown and Luttrell, 2004).

In 1999, an independent observer was appointed (as a structural adjustment conditionality) to work with the Cameroon interministerial committee for the allocation of forest concessions. Two local legal and accountancy firms were employed to increase the rigour and objectivity in the scrutiny of tenders. In 2002, a forest management plan oversight initiative was developed in Cameroon, and official contracts were awarded respectively to Global Witness (for enforcement monitoring) and Global Forest Watch (for monitoring of forest operations). Both contracts aimed to make authoritative information available to national and international users regarding the industry's respect for forest management plans (Brown and Luttrell, 2004).

In Brazil, the Brazilian environment and natural resources institute IBAMA joined forces with Greenpeace in 2000 to control illegal logging of mahogany in the Amazon. Greenpeace's investigative work exposed large-scale illegalities in Indian lands. Based on this information, IBAMA and Greenpeace conducted several inspections that in five days netted the largest volume of mahogany logs in Brazilian history: 7 165 m^3, valued at US$7 million. Shortly afterwards, IBAMA's President announced that the government had stopped all mahogany logging plans in the states of Para, Mato Grosso and Acre, except those certified as under sustainable forest management (Greenpeace, 2001a, 2001b).

There are various partnership modalities. The first type (Ecuador, Cameroon) simply consists of contracting out some particular function – such as organizing inventories or bidding procedures, awarding concession contracts or licences, or controlling forest product transport and verifying compliance with sustainable forest management indicators in the forest – to an independent and reliable specialized entity of the private sector or the civil society. In Peru, the implementation of the law is expected to rely on Forest Management Committees (*Comités de Gestión Forestal*). These are basically partnerships between the local branch of the public forest administration, concessionaires, indigenous and peasant communities, local environmental and other institutions, which have the responsibility of controlling harvesting operations, coordinating maintenance of common infrastructure and providing surveillance and conflict resolution services.

Independent forest monitors/observers

Another form of collaboration is the use of independent monitors and observers, whose mandate is to assist governments with an informed and independent assessment of the efforts and achievements of the forest administration and related agencies in investigating and suppressing forest crime, and to make recommendations for improvements to the current system. The independent monitor is not expected to implement government policy. Box 42 describes the main advantages of this type of arrangement.

Independent monitors/observers have been used by the governments of Cameroon, Cambodia, Indonesia, the Philippines, Ecuador, and Canada. In Cameroon and Cambodia, the international NGO Global Witness was contracted as the independent monitor in 1999. It issued a wide range of policy, legal and technical recommendations based on field missions. In both cases, the independent monitors were proposed and supported by international donors as conditions for the granting of structural adjustment loans. Eventually, however, independent monitoring might become more common practice and not be tied to loan conditions, as a result of market pressure through schemes such as the EU Forest Law Enforcement, Governance and Trade (FLEGT) licensing system, which are expected to drive demand for independent monitoring from exporting countries (see Chapter 5 and Annex 3 for more details). Although frictions between governments and independent forest monitors have occurred, such as in Cambodia (revocation of the independent monitor's contract by the Royal Government of Cambodia in 2003), independent monitoring often creates political space in which debates about illegality can take place. Independent monitoring has the potential to strengthen calls for reforms and anti-corruption measures, which are welcomed by those officials with a genuine interest in their public duty. The willingness of the government and forest administration to tackle the issues of illegality and corruption in the forest sector and their commitment to transparency are prerequisites for an enabling environment for independent forest monitors. Likewise, agencies undertaking independent forest monitoring need to be impartial to all partisan interests in order to retain their legitimacy and credibility in the eyes of their stakeholders.

BOX 42

Relative strengths of independent forest monitors or observers

An independent forest monitor or observer is a third party organization that, with the agreement of government authorities, provides observation of and support for an official forest law enforcement system. Arrangements between government and a third independent party provide the following advantages.

- ***Independence.*** The independent monitor has a high degree of credibility due to its lack of affiliation with national political or economic interest groups, and the consequent ability to investigate politically sensitive situations.
- ***Non-governmental, non-profit making status.*** Related to its independence, the monitor does not operate to obtain profits and therefore it eliminates or at least reduces the possibilities of conflicts of interest and dominance by powerful economic interests.
- ***International, multisource funding.*** It is frequent for the international monitor to be funded by a number of donors, often international agencies. This is a desirable feature because independent funding contributes to shielding the monitor from the manipulations of domestic interest groups.
- ***Official role.*** It is essential that the state acknowledges the need for and supports the objectives of the independent forest monitor; otherwise it is not possible to verify the activities of the government officials or the implementation of logging concessions. However, forest monitoring without an official role can of course also occur, by local communities and NGOs, and (as in the case of EIA-Telepak in Indonesia) supported by an international NGO and donor finance. This form of monitoring has been termed "external monitoring".
- ***No enforcement role.*** The monitor gathers, analyses and provides relevant information and data to the government but the delicate task of actual enforcement of regulations remains with the government.
- ***Confidentiality.*** Independent forest monitoring provides a confidential independent channel to collate and verify information on infractions and collusion.
- ***Analysis.*** The detailed mechanisms of illegal activities are analysed, as testimonies from field foresters, ministry officials, law agents, the judiciary, NGOs and communities can be used while protecting individual identities.

Sources: Global Witness, 2005b; Brown and Luttrell, 2004

Independent monitors also need to be protected in carrying out their tasks (Brown and Luttrell, 2004). Institutional rules and structures need to be put in place to enhance both of these elements (Box 43).

By and large, independent monitors have been found to be very effective in increasing the levels of information about the sector and the extent of law

BOX 43
Design of monitoring systems

In planning programmes of verification, consideration needs to be given to the various elements that can, in combination, create positive momentum for change. These include the following.

- The regulatory function needs to be monitored at all relevant stages (concession allocation and the whole production and marketing chain) if the overall effectiveness of the system is to be secured.
- The simultaneous presence of one or more external monitors, in addition to the official independent monitor(s), may facilitate the circulation of information, and keep up the pressure for systematic reform.
- Attention needs to be given to the reporting framework within which the monitor works, and the validation of its findings through appropriate fora which widen ownership and accountability.

As regards the reporting framework, two key functions are institutional buffers and information filters. These are usually combined in some kind of reporting body which receives, assesses and validates monitoring reports before their publication by the monitor, and acts as an intermediary between it and the government. In some cases, representatives of different government ministries and donors are involved; in others it is an institution insulated from political influence.

Source: Brown and Luttrell, 2004

compliance within it. They have also helped to reveal the political interests and relationships which underpin these practices. In some cases, this increase in available information has been matched by increased discipline within the state enforcement agency and the timber industry (Brown and Luttrell, 2004). A guide has been prepared which describes the general criteria that need to be in place for independent forest monitoring to operate effectively, while recognizing that each country has its own history, characteristics and needs and therefore requires tailor-made independent monitoring (Global Witness, 2005b).

Timber Compliance Assessment Partnerships (TCAP)

TCAP are a type of multistakeholder partnership which go beyond monitoring. They produce evidence of actual forest practices on the ground, document their compliance with agreed indicators of acceptable performance and communicate this to the market and the public. TCAP were established by the Global Forest Watch (GFW) initiative of the World Resources Institute (WRI). TCAPs are a concept under development that could unite diverse forest stakeholders in a given region to assess compliance between certain norms, such as the law or a set of criteria for good forest management, and actual practices in the forest.

In Central Africa, this partnership is promoting the establishment of the Forest Concession Monitoring System for Central Africa (FORCOMS). FORCOMS endeavours to provide public access to verified concession-level information on measurable actions and voluntary commitments by timber producers in Central Africa to support legal and sustainable forest management as defined through previously agreed indicators. The core principles resulting from many multistakeholder discussions on the organization and functioning of FORCOMS as initially put forward can be summarized as follows (World Resources Institute, 2001).

- The forest concession holders agree to be monitored and to voluntarily provide the bulk of data needed for the previously agreed indicators to an independent body. An independent body gathers the data and, where necessary, carries out limited spontaneous field verifications and analyses necessary to report findings based on the indicators.
- A steering committee composed of representatives from international NGOs, institutions, the private sector and donors oversees the process to guide and validate the system.
- The independent body periodically provides the tropical timber market and broader public with details of findings through a Web site and printed reports.

WRI-GFW and partners are developing a framework that would guide such partnerships in multiple regions. A trial TCAP funded by ITTO is being implemented in the Congo.

Forest certification

While forest certification is a tool designed to assess the sustainability of forest operations, the implementation of certification initiatives and the development of certification standards also provide opportunities to address legal compliance. Forest inspections carried out by an independent, third party accredited organization assess the forest owners'/operators' compliance with a set of criteria and indicators; this almost always includes the operators' adherence to the legal framework for sustainable forest management (Box 44 and Annex 2). Establishing forest certification partnerships is therefore a practice that can ensure that timber from certified forests is not only legal but also sustainably produced according to the criteria of the certifier. If information on certification follows the wood through the chain of custody, informed consumers can have a positive influence on forest management by choosing products which originate from well-managed forests. Although forest certification by itself is not really a partnership, forest operations certified to programmes that meet stated criteria could be given incentives, such as avoidance of official inspections.

Voluntary corporate codes of conduct

Corporate codes of conduct are voluntary initiatives by which corporations, either independently or as members of industry associations, commit themselves to follow self-defined principles of social and environmental responsibility,

BOX 44

Certification and legality in Bolivia

The Government of Bolivia, in its major restructuring of the policy and legislative framework of the forestry sector, began accepting independent certification of sustainable forest management as evidence of law compliance in its concession system. This was due to the close correlation between the legal requirements for the management of forests in concessions and the requirements of independent certification.

Certification is easier and less costly for law-abiding firms implementing sustainable forest management plans. Certification is also desirable for entrepreneurs because certified forests are exempt from the government forest audit. Some concessionaires and entrepreneurs have indicated that they prefer to deal with an independent certifying firm rather than with government bureaucracy (Jack, 1999).

At the same time, independent certification is beneficial to the Superintendence (the national forest service) as it frees up scarce resources that would otherwise be dedicated to monitoring and enforcing the application of sustainable forest management plans in forest concessions.

Source: Contreras-Hermosilla and Vargas Rios, 2002

including compliance with the law of the countries where they operate (see Box 45 and Annex 1 for more details).

Although these are private initiatives, public forest administrations have in some cases contributed to the design of the codes, persuaded interested enterprises to adopt them and established incentives for companies that follow codes of conduct.

ACCESS TO INTERNATIONAL SUPPORT

Improving law compliance in the forestry sector is primarily the responsibility of governments in the affected countries. In recent years, however, producer and consumer countries alike have paid increasing attention to forest law compliance, with many of their activities being triggered by the G8 Action Programme on Forests of 1998-2002 (Brack, 2005). The main initiatives, which are briefly described below and in more detail in Annex 3, include:

- bilateral or multilateral agreements between individual consumer and producer countries to keep illegal forest products out of international trade;
- international organizations, including those lending technical and financial assistance;
- international non-governmental organizations, which carry out analytical and monitoring functions, and effectively contribute to raising awareness about the nead for law compliance.

BOX 45

Examples of key forest industry declarations

Statement by the Confederation of European Paper Industries (CEPI) on illegal logging and forest law enforcement, governance and trade

In their willingness to contribute to the indispensable action to combat illegal logging, while considering that prime solutions should be found where such practices take place, CEPI and its members:

- Commit themselves to support and cooperate with governments in their actions to halt illegal logging and secure good governance and law enforcement within the existing legal and institutional framework.
- Strongly commit themselves to the purchase and use of wood only coming from legal logging.
- Firmly condemn corruption and criminal activities related to illegal logging that tarnish forestry and forest-based activities.
- Encourage sustainable forest management according to internationally agreed principles. In this context, voluntary and market-driven certification systems may constitute as one, but not the only instrument towards greater sustainability.
- Request a clarification of responsibilities, notably by securing land tenure.
- Are supporting cost-efficient measures aiming at verifying the origin of wood, and demand trade not to be made more difficult through unjustified administrative burdens or constraining measures.
- Recommend not taking any action or measure that would penalize wood-based products, compared to competing non-renewable materials.

The Confederation of European Paper Industries represents trade associations from 18 countries and includes 1 000 companies and 1 300 mills employing directly some 260 000 people. Its members produce some 28 percent of the global production of paper.

Statement on illegal logging by the International Council of Forest and Paper Associations (ICFPA)

The ICFPA is unified behind the following principles:

- ICFPA encourages sustainable forest management according to internationally agreed principles. ICFPA acknowledges that voluntary and market-driven certification systems can partially address the problems associated with illegal logging. The private sector must be vigilant in situations where illegal logging is suspected and all levels of government must work to enforce laws established to prevent it.
- ICFPA strongly supports the conservation of forest areas, which have been designated for protection by law. ICFPA encourages governments and the private sector to work together to end all illegal logging from areas where timber harvesting is expressly prohibited.
- ICFPA members commit to abide by domestic and sovereign laws pertaining to logging and harvesting in any country where logging and tree removals take place.

- In countries where such laws are not in place, ICFPA supports the establishment of laws and regulations that promote and advance sustainable forest management and their subsequent enforcement.
- ICFPA supports government monitoring and assessment of forests as essential to devising appropriate and effective measures to counteract illegal logging and trade of illegally harvested wood. Accurate and reliable information will greatly improve the ability of governments and private landowners to curtail illegal activity.

ICFPA's membership is comprised of trade associations in 43 countries, representing industries accounting for more than 90 percent of the world's paper and more than 50 percent of the world's wood production.

Responsible Purchasing Policy of the United Kingdom's Timber Trade Federation (TTF)
TTF is an industry federation which has developed a code of conduct to attempt to eliminate illegal timber from its supplies. TTF members can develop Responsible Purchasing Policy company commitments and send a questionnaire to all their suppliers in order to assess and grade their environmental performance as low, medium or high risk. Members also compile annual management reports summarizing supplier assessments and setting improvement targets for the following 12 months, which are audited by a TTF-appointed independent auditor.

Sources: CEPI, 2002; ICFPA, 2002; TTF, 2005

Bilateral and multilateral initiatives

A great deal of international attention has been dedicated to international schemes, which seek to restrict imports of timber for which legality cannot be verified while simultaneously helping exporting countries to filter out exports of dubious origin. These schemes are of particular interest to countries with significant exports of forest products. They can be either bilateral agreements between a country and its trading partners (Box 46) or multilateral agreements involving a large number of exporting and importing countries. The current state of these initiatives is described in Annex 3. They are summarized here.

Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES). With 166 signatory countries at the time of writing, CITES is the only truly global scheme imposing restrictions on trade in wood products. This legally binding convention has three lists, or appendixes, each including species endangered to different degrees. CITES provides for different rules governing international trade in species listed in each appendix. By controlling international trade, CITES contributes to closing an economic window for trade in endangered timber species. Currently, relatively few timber species are included in the CITES appendixes, but the recent inclusions of mahogany (*Swietenia macrophylla*) and

ramin (*Gonystylus* spp.) in Appendix II have led to stricter controls on the harvest and international trade of these species.

Forest Law Enforcement and Governance (FLEG). FLEG processes are regional World Bank-coordinated initiatives to foster political commitment and facilitate cooperation to fight illegal logging and trade. The first regional FLEG was launched in Southeast Asia in 2001 and a similar process followed in Africa in 2003. In 2005, the World Bank started collaboration with the EU to ensure continuation of the African and Asian FLEG processes and initiated a similar initiative in Latin America. The Russian Government intends to hold the first Ministerial Conference on Europe and North Asia Forest Law Enforcement and Governance (ENA-FLEG) during 2005. All FLEG processes define priority issues of forest law enforcement and governance and a list of actions to address both illegal logging and illegal timber trade throughout the respective regions.

European Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan. In 2004 the European Commission approved the creation of a Forest Law Enforcement, Governance and Trade Action Plan. The Plan promotes bilateral agreements between

BOX 46

Bilateral agreements between Indonesia and trading partners

Bilateral agreements have been signed with the United Kingdom, Norway, China (all in 2002), Japan (2003) and Korea. These involve a Memorandum of Understanding committing the parties to work together to reduce, and eventually eliminate, illegal logging and international trade in illegally logged timber and wood products.
The action plan of the Indonesia-United Kingdom agreement, the most advanced to date, includes a series of activities to be undertaken in both countries covering the following areas: identification of relevant legislative reforms and related actions; development, testing and implementation of systems to verify legal compliance; technical and financial capacity-building assistance from the United Kingdom; support for civil society's involvement in efforts to curb illegal logging; development of systems for timely collection and exchange of data; collaboration between the countries' enforcement agencies; and encouragement for industry action, including sourcing only timber and wood products identified as legal. In 2004, a series of actions focusing on the province of West Kalimatan were initiated, including NGO involvement in monitoring, assessment of training and equipment needs, closer cooperation between provincial enforcement agencies, improved data collection and analysis. The first phase of field testing the legality definition and the tracking system has been completed, and plans are in preparation for their wider application.

Source: Richards, 2004; H. Speechly, DFID, personal communication, 2005

importing and exporting countries to create, with the help of the EU, a voluntary licensing scheme to verify the legal origin of wood imported into Europe. The plan does not impose binding trade restrictions (the scheme is voluntary) but it rather attempts to support country efforts to suppress illegal logging and trade by discouraging markets for products that cannot be validated as legally sourced.

Asia Forest Partnership and the Congo Basin Forest Partnership. Both of these regional initiatives were launched at the World Summit on Sustainable Development in Johannesburg in 2002. Their objective is to facilitate country cooperation in various areas, many of which are exposed to illegal activities. Both partnerships include country governments as well as a wide range of relevant stakeholders including international organizations and civil society groups.

The United States President's Initiative against Illegal Logging. The United States launched the President's Initiative against Illegal Logging in 2003. The goal of the Initiative is to assist developing countries to combat illegal logging, trade of illegally sourced timber products and corruption. It focuses on the countries of the Congo Basin, the Amazon Basin, Central and South America, and Southeast Asia.

The United Kingdom's Illegal Logging Programme. This three-year programme, launched in October 2002, aims at facilitating reforms by national, regional and international institutions to address the problem of illegal logging and international trade in illegally harvested timber. It focuses on improved governance of the forests in West and Central Africa.

International organizations

Virtually all international organizations dealing with natural resource use have programmes aimed at improving forest law compliance. The World Bank Forestry Strategy prominently includes actions aimed at promoting forest law compliance. The Bank also hosts the Programme on Forests (PROFOR), a multidonor initiative established in 1997. Its objectives include enhancing accountability in the forest sector, improving understanding of forest law enforcement, supporting empirical research to fill information gaps and assessing possible tools to facilitate enforcement. ITTO supports several countries in designing and implementing programmes for forest law enforcement and has undertaken an analysis of trade data discrepancies that can be related to illegal trade (see Chapter 6). FAO hosts the National Forest Programme Facility, a multidonor support mechanism that helps countries strengthen their knowledge basis and provides assistance to facilitate broader stakeholder participation as well as legal and policy reform. These international organizations offer multiple possibilities to countries committed to fighting illegal activities in the forest sector. They can assist governments in rationalizing their policy and legislative framework, in training staff responsible for planning, monitoring and enforcement or by providing technical assistance programmes to support forest operators with the design and implementation of forest management plans.

Non-governmental organizations

Local, national and international NGOs can be strategic allies to improve law compliance in the forest sector, if governments are open to cooperating with such organizations. There are many NGOs active in the forest sector and they have played a key role in raising the issue of forest law enforcement on the international agenda. The role of Global Witness as an independent forest monitor/observer has already been discussed above. Global Forest Watch, established under the World Resources Institute, has carried out concession monitoring work in several countries that has led to improved government supervising of forestry operations. The Environmental Investigation Agency, working with local NGOs in countries such as Indonesia and Cambodia, has compiled evidence of illegal activities and assisted governments in bringing perpetrators to justice. The Nature Conservancy and WWF have begun an alliance to promote sustainable forest management and curb illegal logging and international illegal timber trade in Indonesia (Box 47). Partnerships with such NGOs promote transparency and can often catalyze forest law enforcement activities by governments.

BOX 47

The role of NGOs and the market in fostering better governance in the forest sector

In North America and Europe, markets that favour environmentally friendly forest products are having a major impact on suppliers in other countries. Thanks to NGO campaigns and fear of criticism, large retailers, including IKEA, The Home Depot, Lowe's and Carrefour, have announced policies to exclude illegally harvested timber from their supplies. As a result, some forest product companies in Indonesia are starting to make voluntary investments to improve forest management in order to increase competitiveness and gain preferential access to high-value markets in North America and Europe.

An alliance was initiated in December 2002 by two NGOs (The Nature Conservancy and WWF) to bring together business, governments, and environmental organizations to promote responsible forest management, combat illegal logging and create market links to promote use of wood from well-managed forests with a focus on Indonesia. The alliance provides input to national and regional activities led by governments, such as the FLEG process and the Asia Forests Partnership and provides technical assistance to companies and communities. It also works to improve communication between "green" foreign buyers and Indonesian suppliers. The Nature Conservancy has also worked with the governments of Indonesia and the United Kingdom to develop a set of principles, criteria and indicators of legality for forestry operations and timber processing in Indonesia.

Source: The Nature Conservancy and WWF, 2005

CONCLUSIONS

Increasing the efficiency of the public forest administration often requires many more resources than are available in most countries. Relatively low-cost options do however exist, including to:

- Prioritize and strategically focus the law enforcement efforts of the public forest administration on key actions, regions or actors.
- Increase the operational capacity of the forest administration to detect and suppress forest crimes, for instance by restructuring or creating new institutional bodies and increasing staff number and performance.
- Promote better interagency linkages at the national and local levels.
- Establish partnerships with appropriate NGOs, civil society or private sector actors to support enforcement and/or monitoring.
- Encourage the development and use of independent forest certification and voluntary corporate codes of conduct.
- Engage in bilateral agreements with selected trading partners or in multilateral agreements involving a large number of exporting and importing countries to limit illegal timber trade.
- Tap into the forest law compliance programmes of international organizations dealing with natural resource use.
- Enable citizens, supported where necessary by NGOs and government agents, to assist in monitoring and detecting forest crime.

6. Improving data and knowledge

Many of the case studies undertaken for this paper highlight a lack of reliable and up-to-date information on the forest resource and how it is changing. Data and knowledge about the location, extent and nature of legal and illegal operations in the forest sector is also at best fragmented. Good information is essential for preventing, detecting, monitoring, reporting and investigating illegal operations, and thus facilitating law enforcement. Increased data about illegal forest activities will also enable governments to establish priorities for remedial actions. However, information will only be meaningful if a well-functioning policy is in place (see Chapter 4). The availability of data will allow the political debate, which invariably involves disparate interests, to focus on empirical evidence on magnitudes, causes and systemic weaknesses that need to be addressed in organizing corrective actions (Thomas *et al.*, 2000).

MONITORING AND ASSESSMENT OF FOREST RESOURCES

Forest resources assessment and monitoring can provide invaluable information for the development of adequate forestry policies and legislation. However, very few developing countries have up-to-date information on their forest resources and their tenure, and even fewer have the national capacity to generate such information. This problem is not limited to the developing world; the situation is also less than satisfactory in several industrialized countries. When they exist, state assessments of the forest resource are not always made public. Another key problem is the lack of reliable information on where and how forests are inhabited and used by local communities. The lack of a reliable baseline makes it difficult to identify illegal operations and to prosecute law offenders, as it is almost impossible to evaluate and demonstrate the nature and magnitude of the forest alterations they have caused.

National forest assessments are conducted in many countries and aim to fill this information gap. Once primarily focused on measuring the availability of wood and later forest area, they are now moving to address the full variety of benefits from forest and tree resources, including:

- extent of forest resources and global carbon cycle;
- forest ecosystem heath and vitality;
- biological diversity;
- productive functions of forests;
- protective functions of forests;
- socio-economic functions of forests.

Besides tree measurement, some countries (such as Sweden) include stump measurement in their national forest assessments, in order to obtain a rough

estimate of the real volumes harvested. When compared to the official harvest figures, this information gives an approximate picture of the scale of illegal logging.

Tools used for assessment and monitoring of forest resources include: remote sensing, satellite navigation systems, field measurements and inventories, mobile information and communications technology.

The following points are of particular importance for promoting the timely detection of illegal operations in the forest sector and inducing law compliance:

- ensure accurate and timely mapping and demarcation of forest areas;
- promote linkages between policy processes and the systems of forest information gathering, e.g. by using information based on forest resource assessments to set realistic harvest limits/annual cuts, which will in turn help determine an appropriate level of industrial capacity;
- make forest assessments available to the public.

ESTABLISHING STANDARDS OF LEGALITY

Improving law compliance in the forest sector requires a commonly agreed operational definition of what constitutes legality in order to enable enforcers to identify and distinguish between legal and illegal acts.

The scope of forest-related legislation, and therefore the array of possible illegal forest activities, is vast, and may involve labour laws, health regulations, tax laws, financial and banking legislation, and laws related to environmental protection. Because of these numerous legal dimensions, a universally accepted definition of legal products may not be possible or even desirable. The United Kingdom's Centre for Expertise in Timber has been established to deal with the issue of proof of legality and to develop the elements of what a definition needs to cover in the context of the United Kingdom's public procurement policy (Speechly, DFID, personal communication, 2005).

Since illegal activities affect many groups (various branches of government, forest landowners, forest products industry, indigenous peoples organizations, rural communities, consumers' organizations, etc.), a commonly agreed working definition of illegal acts in the forest sector can be best reached through a participatory approach and by including these actors in any conceptualization of legality. An agreement on definitions can be achieved, for example, through discussion fora or workshops involving these groups. Given the dynamic nature of the legal framework, working definitions of legality will need to be revised periodically.

While there is no universally accepted way to address all aspects of legality in the forest sector, Box 48 gives an idea of the possible elements to be included and of the potential complexity of operational definitions of legality. Countries should identify all elements required to define their standard of legality, taking into account international norms and local circumstances. Determination of what defines legality is the right of each country and the inclusion of a law in such a definition should be based on an analysis of the degree of harm that results from

BOX 48

Potential components of legality

- ***Tenure and use rights.*** Clearly established property rights or use rights approved by relevant authorities; clear property boundaries, land registries, and approved uses of land
- ***Forest management.*** Forest management plans including silvicultural systems to be employed, harvesting plans and permits
- ***Protected areas.*** Conformity with protected area legislation both within the forest management unit and in surrounding areas
- ***Protected species.*** Compliance with laws and regulations regarding protected species of flora and fauna and their habitat
- ***Environmental and social impact assessments.*** Observance of laws and regulations regarding environmental and social impacts and mitigation procedures
- ***Indigenous peoples and local community rights.*** Compliance with legislation related to the protection of indigenous and local community rights that may be affected by forest operations
- ***Workers rights, health and safety.*** Respect of work laws such as those related to minimum wage and job stability, as well those concerning health conditions and safety of operations
- ***Taxes and fees.*** Compliance with tax laws and other payments to government related to the operations of forest corporations
- ***International agreements.*** Satisfaction of prescriptions contained in international treaties such as CITES and the Convention on Biological Diversity
- ***Chain of custody.*** Compliance with regulations that mandate specific ways to prove legal origin through the whole chain of custody
- ***Product marking.*** Observance of rules regarding marking and identification of products and consistency with associated documentation
- ***Processing, sales and shipping.*** Compliance of processing, sales and shipping corporations with legal requirements for their activities such as operating licences, registration with relevant authorities, building permits for processing and storage facilities

Source: Amariei, 2004

non-compliance. In this regard, it is important to distinguish between crimes and regulatory offences.

As Box 49 shows, Indonesia has already taken up many of the elements outlined in Box 48. In Indonesia, where about 900 laws, regulations and decrees govern timber exploitation, transportation and trade, a draft "legality standard" was developed to help auditors and buyers in differentiating between legal and

BOX 49

Indonesia: proposed principles for establishing legality of timber products

The following principles are further described by criteria and are complemented by indicators to verify compliance.

- ***Land tenure and use rights.*** The legal status of, and tenure rights of the Forest Management Unit are clearly defined and its boundaries have been properly set. The Company has documented, legally established rights to harvest timber within those boundaries, and only within those boundaries.
- ***Physical and social environmental impact.*** The Company has an Environmental Impact Assessment (AMDAL) prepared in the prescribed manner and demonstrating that the forest management unit complies with all legal, physical, social and environmental requirements stated in the AMDAL, as well as all legal requirements for monitoring and reporting on implementation of the AMDAL.
- ***Community relations and workers rights.*** The Company complies with all its legal responsibilities in ensuring the well-being of communities affected by its activities in the forest management unit, its provision of services to local communities, and the well-being and safety of its workers and contractors employed in the forest management unit.
- ***Timber harvesting laws and regulations.*** The company conducts all forest planning, harvesting and other activities within the forest management unit in compliance with relevant government regulations.
- ***Forest taxes.*** The company pays all relevant legally prescribed fees, royalties, taxes and other legal charges related to the use of the forest management unit and the timber extracted from it.
- ***Log identification, transfer and delivery.*** The company ensures that all logs transported from the forest management unit are properly identified, have correct associated documentation and are transported in accordance with government regulations.
- ***Timber processing and shipping.*** Timber processing facilities and shipping companies have valid licences and operate in accordance with applicable government regulations.

Source: Royal Institute of International Affairs, 2004

illegal Indonesian wood. The standard comprises seven broad principles of legality, each supported by several criteria and indicators linking the principle to existing Indonesian legislation. Guidance notes to assist auditors in verifying compliance with each indicator have also been developed. This draft standard is the outcome of a participatory process conducted between April and June 2003 in several Indonesian districts. However, agreement from all stakeholders is still uncertain.

Field testing of the system started in mid-2004. Development of the standard was carried out under the auspices of the Indonesian Ministry of Forestry in close partnership with The Nature Conservancy (TNC) under the Indonesia-United Kingdom Memorandum of Understanding on illegal logging (see Box 46).

IMPROVING DATA AND KNOWLEDGE FOR PREVENTING FOREST CRIME

On-the-ground verification/monitoring

Along with appropriately targeted incentives, monitoring is one of the most effective methods of preventing forest crime. Although direct surveillance is often difficult, timely information on operations can be used as a basis for sample on-the-ground inspections to verify the reliability of reporting by forest operators (often a requirement of retaining forest licences rather than a provision of forest law). Information could be supplied by operators according to a standard format and schedule, and complementary information supplied on request. Forestry officials should have the power to inspect all sites relevant to the operation, as well as transport, storage and processing facilities, for instance by including in concession contracts a clause, which explicitly gives officials and independent observers this right. Inspections must be allowed on a routine basis, not just when a crime is suspected (Christy, 2004).

Reporting along the chain of custody

Reporting may also be required of timber dealers and processors but this has to be part of a comprehensive monitoring system to be effective. Simply compiling a list of transactions is not helpful without cross-references to a register of licencees and accurate reports on logging operations. With the increased availability of computer networks, however, these different series of data can be correlated in real time, offering a powerful tool for both prevention and detection of forest crime (Christy, 2004).

IMPROVING DATA AND KNOWLEDGE FOR DETECTING FOREST CRIME

The following methods may help improve the data about illegal activities in the forest sector and in detecting forest crime, sometimes even before an offence has been committed.

Reporting and monitoring

The most effective detection is based on information and analysis; the combination of reporting and sample verification outlined above. This will not necessarily reveal crimes, but it will give a good picture of the location and nature of activities, making it much easier to conduct targeted inspections to detect offences. The basic legal requirements are therefore the same as for preventive monitoring: mandatory reporting and powers of inspection. There are at least three degrees of inspection powers that need to be considered in forest legislation:

- routine inspections, which need to take place regardless of whether a crime is suspected and which should not require a warrant;

- where a crime is suspected and a warrant should be required;
- where a crime is suspected and a warrant is not required.

The type of inspection will depend on each country's general legal system, but the considerations include the urgency of inspection (e.g. a moving vehicle), the difficulty of obtaining a warrant (e.g. when the site is deep in the forest) and the privacy normally accorded the site (e.g. a dwelling). For example, the Republic of Congo authorizes free access to facilities and vehicles but not to houses and domestic enclosures, except in the case of a crime and in the presence of a police officer. Enforcement officers are not authorized to enter houses between the hours of 19.00 and 5.00. Tanzania does not allow searches of dwellings except where a crime is suspected (Christy, 2004).

Because on-the-ground assessments are essential to detect the existence and scale of illegal operations, improving the capacity to carry out effective field monitoring visits should be regarded as one of the most important objectives of any forest law compliance strategy. This should be based on three central elements:

- adequate training of staff involved in field monitoring;
- logistical support (transport, maps, GPS, cameras, etc.);
- use of remote-sensing tools such as aerial photographs and different types of satellite imagery (aerial over-flights have also proven to be very useful in some countries, but of course they are costly).

Diagnostic surveys

Confidential diagnostic surveys of illegal activities can be an effective instrument to estimate their magnitude, procedures employed and motivations. These surveys can be aimed at business, government officials, communities and other major actors in the sector and can provide a useful baseline for designing corrective actions (Box 50). They are most useful if they are aimed at several different actors in order to cross-check the information received. Contrary to initial skepticism, experience shows that respondents can be quite honest and informative. Diagnostic surveys have been useful in obtaining information on the most secretive acts, such as wood "laundering", payments of bribes and specific procedures used to break the law. Surveys can be aimed at measuring the extent of illegal acts, exploring the factors (including policy failure) that facilitate them or investigating specific acts or actors.

Diagnostic surveys require careful design to ensure objective and statistically valid results and therefore, in the final analysis, a degree of credibility. They must assure respondents of the absolute confidentiality of their responses. The employment of independent and reputable surveyors is an important condition to ensure objectivity and credibility (Kaufmann *et al.*, 2001). To date such surveys in the forest sector have been relatively rare.

Informants

Another aid to the detection of forest offences can come from encouraging informants. Legislation frequently foresees rewards for those who help in

BOX 50

Diagnostic surveys of corruption

The design and implementation of agency-specific, in-depth diagnostic surveys for public officials, users and enterprises constitute an innovation that provides tangible inputs for countries committed to implementing capacity building and institutional change programmes. Challenging conventional wisdom, the new surveys of public officials, enterprises and citizens find respondents willing to provide detailed information on misgovernance that they have observed and experienced (as opposed to merely indicating their vague perceptions about countrywide corruption).

Survey respondents report on embezzlement of public funds, theft of state property, bribery to shorten processing time, bribery to obtain monopoly power and bribery in procurement. In these diagnostic surveys, detailed statistics are collected on the frequency and cost of bribes paid by enterprises to regulators in different agencies as well as the shortcomings of public service delivery and other performance and effectiveness indicators. A multiplicity of governance dimensions is included in these diagnostics, permitting an in-depth analysis of issues such as meritocracy, discretionality, budgetary transparency, and poverty alleviation focus and impact. The analysis of these statistics then serves as a vital input for prioritizing in the formulation of a governance improvement reform programme.

When data were presented to members of the business community, major civil society, and the executive and legislative branches, the policy debate abruptly changed from vague, unsubstantiated, and often personalized accusations to one focused on empirical evidence and systemic weaknesses that needed to be addressed.

Source: Thomas *et al.*, 2000

the conviction of offenders, and in some countries even forest officials, whose job it is to enforce the law, are entitled to rewards (see example of Niger in Chapter 5). However, giving a share of rewards to officials, when combined with the ability to levy fines on the spot, may also encourage petty harassing actions to gain rewards at the expense of more laborious investigation of major offences. Informants will be more likely to provide reliable information if rewards can be paid without conviction and protection is provided from vengeful defendants (Christy, 2004).

Use of NGOs as information sources

As already mentioned in Chapter 5, NGOs can be an important and reliable source of information on illegal activities in the forest sector. Several examples in this chapter also refer to the prominent role that NGOs have in detecting and monitoring illegal logging and trade over time.

Industrial wood input-output estimates

When production is highly concentrated, involving only a few firms, industrial output can be monitored and measured in relatively easy ways. This information can in turn be used to estimate the corresponding raw material needs of the industry, which are either met through imported sources, stocks, or national sources. Of these three possible sources, the first two are normally easily monitored. Thus, if the input of raw materials from national sources declared by the enterprise differs markedly from the estimated intake, the difference can reflect the presence of either illegal declaration or illegal sourcing of wood. If wood suppliers are few and requested to declare their sales, discrepancies can indicate illegal sourcing.

This method was used in the Indonesian forest industry, including sawmilling, pulp and plywood production. Figures indicate that conservatively, the aggregate of industry consumed some 61 million cubic metres of wood in 1997. This was well in excess of the 36 million cubic metres that the government considered as the sustainable harvest at that time and indicated the scale of illegal sourcing of wood in the country.

BOX 51

Satellite detection and map-based monitoring of illegal logging in Cameroon

The World Resources Institute (WRI) Global Forest Watch and the Government of Cameroon signed an agreement in 2002 to share data and maps about the country's forests in a bid to curb rampant illegal logging. This is the first map-based monitoring agreement of its kind in Africa. The agreement stipulates that Cameroon's Ministry of Environment and Forests (MINEF) will provide Global Forest Watch with information on forest concessions and allocations in the country. In turn, WRI will produce reports on the state of forest concessions in Cameroon and create maps that will enable MINEF officials to detect illegal logging in the country. Maps of logging roads created by Global Forest Watch from satellite imagery, combined with accurate information on where logging may legally take place, will permit the identification of problem areas and prioritize them for field audits. Satellite imagery makes it possible to detect new logging roads outside of active concession areas and in national parks. They will also help to determine whether the rate and extent of logging follows forest management plans. Global Forest Watch have now released their first Interactive Forestry Atlas of Cameroon. Although data were sometimes incomplete or missing, it includes data on 179 sales of standing volumes (of a total of 331) and 12 allocated community forests (of a total of 67). The information is made publicly available and can be accessed through the Global Forest Watch Web site.

Source: Global Forest Watch, 2002

Aerial surveillance and satellite detection

Some of the best evidence of illegal forest activities comes from aerial surveillance and satellite detection. Expertise is required in order to interpret remote sensing data, and courts may not be willing to admit expert testimony if they are not familiar with the subject matter. However, monitoring of illegal logging using satellite imagery has been used successfully in Cameroon, with the World Resource Institute providing expertise in satellite data interpretation (Box 51).

With support from ITTO, a similar system is being developed by Global Forest Watch for the Republic of Congo and is planned for the Central African Republic and the Democratic Republic of Congo. Costa Rica is currently starting to apply a new system for detecting illegal conversion of forests into pasture land, which is based on the use of GIS and GPS (Box 52).

BOX 52

GIS/GPS-supported detection of illegal forest conversion in Costa Rica

FUNDECOR, an NGO in Costa Rica, whose aim is to promote the conservation and sustainable management of the natural resources of the Cordillera Volcánica Central, has developed a new system to detect illegal conversion of forests to pasture lands. Costa Rica's production forests are generally privately owned, small in size and highly fragmented, and any conversion of forests to other land uses is prohibited by law. Although the regulations governing the development of forest management plans are rigorous and technically sound, complying with these regulations is very costly and time-consuming. Instead of developing the required management plan, many owners therefore prefer to illegally convert their forests into pastures by cutting the underbrush and sowing pasture grasses while leaving the valuable commercial trees standing. Subsequently they request a permit to cut individual trees in pastures, which is easier, cheaper and much faster to obtain than a harvesting permit based on a forest management plan.

With the help of hand-held electronic personal agendas, a geographic information system including the forest cover map of Costa Rica and a GPS, forestry officials can easily determine if the area for which the permit is requested should be under forest cover. The system is affordable (under US$ 600) and has an error margin of only five metres, which is sufficient for most applications. It can also be used to detect illegal logging in forests. FUNDECOR is collaborating closely with the Costa Rican Ministry for Environment and Mines (MINAE) in an effort to introduce this system across the country by helping train forestry personnel in its use.

Source: FUNDECOR, 2005

Log tracking

Log tracking enables authorities to closely monitor timber production and related flows through the chain of custody. It has been used in several countries to improve forest monitoring and control, including in Cameroon (Box 53) and Fiji (Box 54).

Road or river checkpoints

Road or river checkpoints do not require any advanced and costly technology and may, under certain conditions, be very efficient in detecting wood which has been logged or is being transported illegally. The circulation of logging trucks must be restricted to working hours or checkpoints must be manned around the clock, otherwise they will be ineffective. Effective controls have been established in Ecuador (Box 41 in Chapter 5), Mozambique (Box 55) and Honduras.

BOX 53

Collaboration between the Cameroon Government and SGS

As part of the log-tracking project, the independent certifying firm SGS is assisting the Ministry of the Environment and Forests to establish and operate a separate government unit responsible for controlling log flows from forest sources (log ponds initially, then from stumps) through the production chain to ports and processing mills. The project includes the following activities:

- identifying all logs/stumps with bar-coded tags allocated to legitimate logging companies according to agreed cut volumes;
- monitoring log production and movements as declared by the logging companies (barcode number used on regulatory declarations; cross-checking with utilization of the tags) and verifying through spot checks including government control at log yards and roadsides and SGS inspections at ports;
- managing a central database;
- carrying out further field checks independently (field investigation is the responsibility of the Ministry's *Programme de Sécurisation des Recettes Forestières* units operating at checkpoints and mills, and of the Ministry's Central Control Unit in the forest);
- piloting a computerized system and continuous auditing program to control log supplies to processing mills;
- estimating the amount of felling and supply taxes due by industry and monitor processing quotas;
- issuing monthly/quarterly reports and statistics;
- providing training to logging companies and the units of the Ministry's *Programme de Sécurisation des Recettes Forestières* and organizing the transfer of technology.

Source: Amariei, 2005

BOX 54

Log tracking in Fiji

The Fiji Forestry Department has developed a system using information technology to process, document and store information on harvesting, processing and export of its forest products. This initiative, financed by ITTO, includes log numbering to trace any log right back to its stump. A plastic number tag is attached to the log and associated stump after felling. Log tags and hammers were first tested on a wide range of timber species in order to assess feasibility. Log and stump numbers are recorded into a special form, and this procedure is repeated for all trees that are felled. Once the logs arrive at the log landing, additional log sizing and log numbering is done. These new numbers are used by forestry officers during log scaling and in the timber statement. A full-time worker was recruited by the department to carry out the log numbering in the field. He is supervised by the forest ranger responsible for the area. The project was well received by field officers. Fiji is examining the economics of extending the log-tracking system to the national level.

Source: Fiji Forestry Department, 2000

BOX 55

Road checkpoints in Mozambique

One of the most important elements of the current forest control system in Mozambique is based on roadside checkpoints between the logging sites and the major ports and cities, where government controllers check timber volumes by category and track licensing compliance (registered volumes are also used for tax collection purposes). The work of these fixed checkpoints is also complemented when possible by mobile patrols.

A new law forbids the circulation of large trucks at night. The major checkpoints coincide with police posts and therefore operate 24 hours. Those transporting forest products during the night are halted by the police, immediately fined and undergo further controls/investigation. In remote areas, however, the road checkpoints are only manned during the day because of lack of equipment and human resources. There are plans to have all checkpoints working 24 hours a day and to delegate forest law enforcement authority to any official agent (custom officer, police officer, etc.) in the absence of forest law enforcers on the checkpoint.

This system works reasonably well (as proven by the considerable amount of fines that are charged every year). However, one weakness appears to be the lack of qualified personnel.

Source: Del Gatto, 2003; Chicue, Ministry of Tourism in Mozambique, personal communication, 2005

IMPROVING DATA AND KNOWLEDGE FOR DETECTING ILLEGAL INTERNATIONAL TRADE IN WOOD PRODUCTS

Comparing declared exports and the corresponding import statistics can in some cases be used to estimate the extent of illegal international trade. This methodology is most useful if the country is a major exporter and discrepancies occur regularly over time. However, a recent study (ITTO, 2004) identifies a number of sources of discrepancies that do not necessarily reflect illegal activities, including:

- errors in compilation;
- errors resulting from inadequate data collection systems;
- different classification practices;
- discrepancies resulting from product measures and conversions;
- triangular exports, with transit in third countries.

Also, it is not possible to use trade data discrepancies to estimate the extent of some kinds of illegally traded wood products. Examples include:

- products smuggled out of a country, which never enter the official trade circuit and are therefore not reflected in official statistics (no trade discrepancy);
- products smuggled out of a country but legalized through fraudulent means on route to the importing country, thus entering the official system;
- abuse of transfer pricing mechanisms between branches of the same company that may understate the value of exports in order to avoid export taxes etc.;
- declaration of false volumes and species exported, to avoid export prohibitions or taxes. High import tariffs or import quotas induce underinvoicing and mislabelling of products.

The capacity to distinguish between discrepancies indicating illegal acts and other sources of discrepancies is vital to obtaining adequate estimates of illegal trade. This implies the progressive elimination of the "legitimate" sources of discrepancies by examining the systems of import and export.

One such attempt was made in 2002 involving several industrialized and developing countries, and results showed that there were discrepancies that fell outside the range of what could be considered "normal" and therefore were possibly due to illegal or "abnormal" acts (Eastin and Pérez-García, 2002).

When discrepancies are large, occur systematically for a number of years, and cannot be explained by "normal" factors, there is a strong presumption that a large proportion of wood has been illegally traded. Box 56 shows data for the past several years for trade between Indonesia and partners China and Malaysia.

Of possible actions to address data discrepancies and facilitate identification of illegal trade, the following initiatives scored highest in a survey of countries that took part in a number of bilateral investigations of trade data discrepancies (ITTO, 2004):

- encouraging countries to make product measurements for trade reporting more uniform;
- improving cooperation between countries in enforcing customs law;
- encouraging countries to harmonize export declaration and import entry forms;
- providing funding and/or technical assistance to countries to improve data collection systems;
- reviewing customs codes with the goal of harmonizing them further.

BOX 56

Selected Indonesian trade flows with China and Malaysia (1 000 m³)

Product/year	Indonesia–Malaysia		Indonesia–China	
	Malaysia's declared import volume	Indonesia's declared export volume	China's declared import volume	Indonesia's declared export volume
Logs				
2001	715	3	1 138	6
2002	199	0	248	2
2003	31	1	116	0
Sawnwood				
2001	33	5	1 168	113
2002	524	9	1 316	333
2003	1 121	17	1 052	153

Source: ITTO, 2005

PUBLIC AWARENESS BUILDING

Resource inaccessibility and an imperfect knowledge of the condition of forests also mean that forest crime is seldom in the public eye. An uninformed public with imperfect understanding of the threats to forest values is unlikely to exert political pressure on elected leaders to force governmental remedial actions. Good forest management translates into few votes in comparison with other far more visible public issues such as education and health that normally tend to dominate the political debate. Therefore, raising the awareness of the general public about the negative ecological, social and economic impacts of illegal activities and the importance of monitoring/detecting illegal operations in the forest sector is of crucial importance (Box 57). Likewise, supporting environmental education programmes among local populations can be important. Assessments of the forest resource and of illegal logging operations should be made available to the public.

BOX 57

Raising public awareness about illegal logging in Costa Rica

As part of its national strategy to combat illegal logging, the Costa Rican Ministry for the Environment and Mines (MINAE) has developed a short television spot which is currently aired regularly on national television. It informs the public about the problem of illegal logging in the country and its negative environmental and socio-economic impacts. It requests citizens only to buy wood from legal origins and to denounce witnessed cases of illegal forestry activities to an easily remembered three-digit phone number, which is accessed by the Ministry. A similar spot was developed by FUNDECOR, an NGO that closely collaborates with the Ministry in its efforts to combat illegal logging. This second television spot raises public awareness of the new technology to detect illegal forest conversion, which is based on the use of GIS and GPS.

CONCLUSIONS

- Accurate and up-to-date information is essential for forest crime prevention, detection, monitoring, reporting, investigation and eventually, suppression. Increased data is needed in most countries about the forest resources and about illegal forest activities, in order for governments to identify priorities for remedial actions and to enforce the rule of law.

- Forest resources assessment and monitoring are indispensable as they will provide baseline data on the state of the forest resources, which will in turn allow monitoring of changes over time.

- A commonly agreed operational definition of legality between trading partners will foster restriction of illegal timber trade. Countries should identify all elements required to define their standard of legality, taking into account international norms and local circumstances.

- Once a definition of what constitutes legality in the forest sector has been developed and agreed upon by all stakeholders, the following methods may help improve the data about forest resources and contribute to detecting forest crimes:
  - on-the-ground verification/monitoring and reporting of forest operations;
  - confidential diagnostic surveys of illegal activities aimed at business, government officials, communities and other major actors in the sector;
  - use of informants in the forest sector and of NGOs to obtain up-to-date and timely information about forest resource change and illegal operations;
  - industrial wood input/output estimates to identify illegally sourced supplies;
  - aerial surveillance and satellite detection;
  - log tracking;
  - computerized road checkpoints linked to licences registration system.

- Comparing official exports and import statistics can be used to estimate the extent of illegal international trade, especially if discrepancies are large and occur systematically for a number of years.

- Raising awareness about the impacts of illegal forestry is also crucial in order to gain wide acceptance and support for law enforcement in the forest sector within society at large.

7. The political economy of forest sector law compliance

Governments often face difficulties in mobilizing the support needed to implement policy and legal reforms in the forest sector, usually because of opposition by powerful economic and political interest groups. Such resistance is quite common, as illustrated in the case studies for Cambodia and Ecuador where interest groups effectively prevented efforts to independently monitor illegal operations in the forest sector. Thus, policy makers need to anticipate conflict and find ways to accommodate the diverse interests that will be affected by changes in government policies, laws and institutions.

UNDERSTANDING POWER RELATIONSHIPS

Policy, legislative and institutional reforms will largely be shaped by power relationships between various individuals and groups. Reforms to foster better governance in the forest sector are unlikely to survive parliamentary debates and behind-the-scene deals unless they can overcome the opposition of those that will lose out if reforms are approved.

It is therefore of utmost importance to map the structure of power groups and individuals likely to have an influence on the approval and implementation of reforms. Relevant groups include those who have political and/or economic power, such as high-level officials in forest and forest-related state bureaucracies (including agriculture, infrastructure development, energy, etc.), forest industrialists, concessionaires and large-scale ranchers/farmers. Other constituencies, which are generally politically disempowered such as shifting cultivators, indigenous communities, and landless peasants may to a lesser extent exert influence in a more informal way, for instance through NGOs and the media. Different constituencies have different values, experiences, knowledge, institutional loyalties, and political and economic power. Power issues are intrinsically linked to accountability issues. The notion of being accountable to someone or some group implies that people with power will acknowledge their responsibility to those who do not. It is important to understand these issues in order to build society's understanding and support for policy and legal reforms.

BUILDING WIDE SUPPORT FOR REFORMS

Analysis of how new measures for forest law enforcement will affect various interest groups can help identify proponents and opponents of reforms (including groups outside the forest sector), who may exert pressure on decision-makers. Assessing and understanding the historical and cultural contexts which shape

public opinion is also crucial for ensuring the success of any reform. For instance, some societies may tolerate corruption more than others and therefore government initiatives to control corrupt acts may meet with relatively apathetic public reaction and support.

Gaining support from those most adversely affected by reforms

The feasibility of implementing corrective actions in the forest sector depends partly on how intensely costs and benefits are perceived by various actors. Support for law compliance will certainly come from those that benefit from it. For example, the Treasury or Finance Ministry is likely to support reforms if increased respect for the law leads to higher government revenues. Those forest operators who are already following the rule of law will also be likely to support efforts that contribute to creating a level playing field and eliminating illegal competitors. Communities may also support the law if it respects and protects their traditional rights.

Once an analysis has been carried out about how changes will affect different stakeholders, it is crucial to design measures to reduce resistance to change. For example, the Bolivian law which established a single concession fee rate (see Box 28) was strongly opposed by concession holders, and many abandoned large tracts of their concession areas or refused to pay the fee, leading to widespread lack of compliance. A sound economic analysis of how the fee affected the financial situation of concessionaires, of how concessionaires might have organized resistance to the law, and finally of how the system made the forest administration financially vulnerable to non-compliance could have perhaps avoided some of the problems or at least facilitated the planning of contingency actions.

Gaining support from the public at large

Public opinion is often a key factor in winning political support for new laws and regulations. Public support depends partly on the distribution of costs and benefits arising from law enforcement. The Bolivia case shows that although only a restricted group of concessionaires organized the campaign against the new regulations, their efforts were effective because the public at large did not perceire the benefits of enhanced law compliance. Accordingly, mobilization of political support needs to be anchored in an effort to inform political constituencies and the public of the social benefits resulting from law compliance. Public information and education can be a useful strategy to gain political support for change, although it is usually time-consuming and therefore should form part of a long-term strategy for improving forest sector law compliance.

CONCLUSIONS

- Interest groups negatively affected by reforms aiming at improving law compliance in the forest sector can undermine the design, legislature or implementation of new rules and regulations.
- Reformers will need to analyse the structure, relative strengths and likely responses of all affected parties and plan accordingly to ensure their support for new regulations.
- The strategies for gaining support from various stakeholder groups will vary according to the political, economic and cultural context of the country.

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Annex 1
Corporate codes of conduct

Globalization, liberalization and economic concentration in the forest sector are strengthening the role of private corporations. Although forest resources in many countries are still owned or controlled by the state, forest management, timber harvesting and trade and investments in the forest sector are mostly undertaken by private and commercial groups. Because corporations have increasing economic and political power, their activities have the potential to cause enormous damage. On the other hand, progressive forest companies can instill principles of ethical business in the sector.

The development of norms of behaviour or "codes of corporate conduct" is one of the tools used by companies to promote better forest law compliance. These codes of conduct may go beyond the legal requirements of the countries in which the companies operate. There are two different types (see Box):

- codes of conduct developed by individual corporations;
- codes of conduct designed by an industry group, to be followed by all members.

Other tools used by companies to foster responsible business include:

- Private-public cooperation to develop joint targets (for instance involving the environmental government agency or the public forest administration and individual corporations and industry associations). This type of cooperation has not been established widely in the forest sector but it may occur with increasing frequency in the future.
- Negotiated agreement between a public agency and the industry to achieve certain targets deemed desirable for society. This has not yet occurred in the forest sector.

MOTIVATIONS

Public pressure for more corporate accountability in the forest sector is increasing. Surveys show that a great majority of company executives believe that corporate responsibility is a vital component of their company operations (Dickson, 2002).

Many NGOs, activist and consumers groups and politicians believe that corporations need to play a greater role in reducing the incidence of illegal activities, securing sustainable forest management and fulfilling the environmental and social aspirations of society. NGOs are increasingly analysing and exposing illegal corporate activity and mobilizing the general public. This in turn has a direct impact on the forest industry's image and operations, and sometimes leads to violent confrontations (for example the highly visible cases of Greenpeace in the Amazon and the reaction against *Vigilancia Verde* in Ecuador and against Global Witness in Cambodia).

Private initiatives to promote forest law compliance

IKEA has developed a "Staircase Model Approach" to promote legal and sustainable forestry among its suppliers. Requirements include that wood products should be legally sourced and that a set of environmental and social standards be respected in the production process. IKEA, in partnership with WWF, has developed a wood tracking system to ensure that there are no leakages along the chain of custody. The partnership has also established producer groups (i.e. cooperatives of timber producers), committed to legal timber harvest.

There are also many examples of industry-wide codes. The Forest Products Association of Canada, the Pan European Forest Certification Council and the American Forest and Paper Association have all published codes of conduct. Other groups who have issued similar declarations include the Confederation of European Paper Industries and the International Council of Forest and Paper Associations. The Interafrican Forest Industries Association (IFIA) has developed a code of conduct for its members operating in the Congo Basin and humid West Africa. In 2002, the Japanese Federation of Wood Industry Associations, the only organization representing the country's wood industries, issued a statement on illegal logging which urged its members not to use illegally sourced wood and promised to support initiatives to verify legal compliance (JFW, 2002). Also in 2002, the Timber Trade Federation (TTF) established a code of conduct to ensure their members' timber supplies are legal and originate from well-managed forests. Forest and chain of custody certification were recognized as the preferred tools to ensure legal origin. TTF has also prepared a ten-point plan of action to ensure that Indonesian timber is legally sourced (Guertin, 2003). The TTF code has been used as a model for similar initiatives in Italy, Japan and the Netherlands. These companies and industrial groups together comprise the vast majority of the world's large forest corporations.

Pressure also comes from company shareholders. Some investment funds are demanding that the companies in which they invest confirm that operations follow the law and are socially and environmentally responsible. For example, in 2001, ABN AMRO led four Dutch banks in developing a new far-reaching forest policy in response to a campaign against Dutch funding of palm oil plantations in endangered orangutan habitats in Indonesia.

A strong brand is an intangible corporate asset, which might determine as much as 65 percent of the share value of a firm (Jenkins, 2001). Image holds most importance for retailers but a host of other companies may be affected indirectly by the propagation of these market preferences up the "value chains" or "supply chains". Several major European and North American wood products retailers already impose strict requirements on their chain suppliers such as compliance with minimum environmental standards and with the law of the country in which they operate.

EXPERIENCES

Corporate initiatives for better governance in the forest sector are relatively recent, designed mainly in an ad hoc fashion and therefore very varied. Some enterprises have adopted company-specific codes while others are part of an industry association's code covering hundreds of members. Some codes are focused exclusively on a particular legal aspect while others also include social and environmental aspects.

Developing and following codes of conduct which promote law compliance may increase efficiency and therefore strengthen a firm's comparative advantage in the long term. Lawfulness will also promote a better corporate image. The corporation may be able to obtain financing and insurance more easily and perhaps at cheaper rates. Relations with customers, suppliers and government agencies may be smoother when mutual trust is high. By operating legally, a company will also avoid the costs of bribes and litigation. Recent research in other sectors is proving that responsible companies ultimately make more money (Schnatterly, 2003, Dickson, 2002).

In order to be effective, codes of conduct should:

- include clauses establishing penalties for non-compliance in order to avoid free riders (most codes do not have strict enforcement mechanisms);
- include external assessments, monitoring and verification and public reporting in order to increase corporate transparency;
- ensure that small companies can join.

Codes of conduct are likely to be less effective if markets do not sharply discriminate between those that comply with the codes and those that do not. However, when these initiatives are supported by third-party monitoring, they can take some of the weight from government institutions in charge of monitoring and enforcing law compliance. Governments wishing to improve forest law compliance should welcome and support such private sector initiatives if they comply with the conditions mentioned above.

Annex 2
Certification

Certification can be an efficient instrument for improving legal compliance in the forest sector. Forest certification is a voluntary, market-driven mechanism, which provides an independent third-party assurance that forest products have been produced according to a set of pre-agreed standards. Some certification schemes are operational throughout the world, including the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification Scheme (PEFC). Others are national in scope, such as the Canadian Standards Association's Sustainable Forest Management Standard (CSA) and the American Forest and Paper Association's Sustainable Forest Initiative (SFI).

Most of these include clauses of law compliance in their standard and consider legality and transparency as one of the pillars of good forest management. Although governments have no direct role in the certification process, several governments have developed purchasing policies that promote the use of certified products. A recent example is the Government of the United Kingdom's November 2004 declaration, which recognizes FSC certification as a guarantee of legality and sustainability. Certification relieves governments of the burden of controlling law compliance as monitoring is conducted by independent third parties.

CERTIFICATION OF FOREST MANAGEMENT

Forest certification ensures that a forestry operation meets specified standards. Forest operations are evaluated according to previously defined environmental, social and economic standards and certified as complying with these standards by a qualified independent auditor. Wood products from these forests may then be labelled so that consumers can identify products from well-managed sources.

Some schemes are self-policed, while others rely on independent, external audits. They may only certify the forest management, while others include chain of custody tracking and certify the products. Some schemes involve all interested parties in the standard setting process and allow public access to information on past or planned forest management activities.

The two schemes of direct relevance to developing and transition countries, where illegal logging and illegal timber trade are significant problems, are the FSC and the PEFC.

The FSC scheme includes systems for independent auditing and chain of custody control. Legality at the forest management level is ensured by compliance with the FSC principles and criteria (see Box). Tracing and tracking forest products is provided by chain of custody certification.

FSC Principles

These principles and associated criteria form the basis for all FSC forest management standards.

- Principle 1: Compliance with laws and FSC principles
- Principle 2: Tenure and use rights and responsibilities
- Principle 3: Indigenous peoples' rights
- Principle 4: Community relations and workers' rights
- Principle 5: Benefits from the forest
- Principle 6: Environmental impact
- Principle 7: Management plan
- Principle 8: Monitoring and assessment
- Principle 9: Maintenance of high conservation value forests
- Principle 10: Plantations

The PEFC is a mutual recognition programme of national initiatives, and therefore its rules and standards change from country to country (Peter, 2003). The PEFC operational guidelines include references to law compliance, such as "legal, customary and traditional rights related to the forest land should be clarified, recognized and respected". The basis for certification includes a provision that "national laws, regulations, programmes and policies shall be respected in forest management and certification. Certification schemes may not contradict legislation." The scheme integrates prescriptions for the respect of international agreements and conventions.

The need for more specific guidance on the legality issue is motivating analyses of the possibilities of implementing independent verification systems of legal compliance. In this case, verification of legal compliance would be a first step towards full certification (Ryder and Amariei, 2003). These schemes are still in the process of being designed and tested.

In 2004 FSC launched its "controlled wood" standard (FSC-STD-30-010, version 1-0), as an international model to ensure legal wood supplies (whether certified as "well-managed" or not). The controlled wood standard allows companies to take steps to ensure that illegal and other controversial sources of timber are excluded from the supply chain. A significant number of companies worldwide, both certified and non-certified, are now working to implement the new standard. The standards provide a simple way for purchasers to specify wood and wood products that exclude the most controversial aspects of forest management from their supply chains. It also allows forest managers operating in situations where full certification may be prohibitive for reasons which are beyond their control – for example, due to lack of clear land tenure – to supply "controlled" wood and gain access to international markets.

Governments can facilitate certification of forest products and thus promote law compliance. For example, the government of Bolivia accepts independently certified forests as complying with the legal prescriptions issued by government. Timber concessionaires have the option of either having government inspectors examining compliance or contracting an independent certification entity to do so. Most prefer an independent certifying body to the more complex procedures of government bureaucracy. The government also benefits, as it does not need to use up scarce talent and resources in securing compliance with the law. This policy has contributed to the spread of certification in Bolivia to some 1.5 million hectares, making the country one of the leaders in the tropical world (Pacheco, 2004).

CHAIN OF CUSTODY CERTIFICATION

Certification schemes with chain of custody tracking can help trace the origin of wood and make it more difficult to hide theft and other illegalities. Chain of custody certification allows forest product manufacturers and traders to exclude illegally harvested material in their supply chains. This then allows retailers and other major forest products users (e.g. national and local state procurers) to avoid illegal wood in their own purchasing.

If information on certification follows the wood through the chain of custody, informed consumers can have a positive influence on forest management.

Certification may have more appeal in countries which export a substantial amount to industrialized countries that are more likely to demand products that originate from legal sources. As a tool to fight illegal acts on a global basis, its effect is still limited. However, although only about three percent of the world's forest area is presently certified and most of it is in developed countries, certification is also making visible progress in southern countries such as Bolivia and Brazil. It is expected that the development of new standards and tools such as the recently developed controlled wood standards will increase the impact of certification in the coming years, allowing it to contribute in a more substantial way to ensuring legality in the forest sector.

Annex 3
International initiatives

The issue of illegal logging and timber trade has become increasingly prominent in the international policy agenda. Several processes, conventions, bilateral and multilateral agreements, internationally and regionally driven, are addressing forest law enforcement, governance and associated trade in the forest sector. The 2002 Johannesburg Plan of Implementation includes a commitment to "take immediate action on domestic forest law enforcement and illegal international trade in forest products, including in forest biological resources, with the support of the international community, and to provide human and institutional capacity building related to the enforcement of national legislation in those areas". Below is a short overview of the most relevant processes and international organizations.

GLOBAL ENVIRONMENTAL CONVENTIONS

Convention on International Trade in Endangered Species of Wild Fauna and Flora (www.cites.org)

CITES is a legally binding treaty, with 166 signatories by December 2004. CITES provides different levels of protection for species listed in its three appendixes. Parties are required to report progress on implementation every two years and to report penalties used for trade in violation with the Convention. Parties are also requested to keep records of all transactions involving protected species and to make those reports available to the Convention Secretariat.

CITES is the only worldwide mechanism that can be used to control international trade of illegally sourced wood. The Convention has contributed to curbing and even stopping the illegal trade of certain species. It only covers species that are either already threatened or expected to be endangered in the near future, and it focuses exclusively on international trade. Although CITES lacks a comprehensive enforcement mechanism, it has increased the visibility of endangered species trade, putting pressure on governments to address the issue. Italy, for example, has substantially tightened controls and inspections over the last few years. A practical kit to facilitate the identification of species, a perennial problem plaguing inspections, is also under preparation (Pettenella and Santi, 2004).

Convention on Biological Diversity (www.biodiv.org)

In 2002, the Convention on Biological Diversity's Sixth Conference of the Parties (COP 6) approved an Expanded Work Programme on forest biological diversity, including studies to assess the effects of unauthorized forest harvesting on fauna and flora, on indigenous communities and on government revenue.

The relationship between forest product consumption in importing countries and unauthorized harvesting activities in producing countries was discussed during COP 6. Other issues included the definitions of illegal activities, capacity building for effective forest law enforcement, codes of conduct, and product tracking systems.

REGIONAL PROCESSES

World Bank-supported FLEG initiatives

The World Bank, the governments of the United Kingdom and the United States, and other partners have organized a series of regional Forest Law Enforcement and Governance (FLEG) processes. The FLEG processes aim at improving governance in the forest sector and fostering international dialogue and cooperation to fight illegal logging and trade between wood producer and consumer countries. They also encourage neighbouring countries to improve linkages and harmonize regulations. FLEG has been widely recognized for mobilizing political commitment to undertake remedial actions in the countries participating in the process.

FLEG Southeast Asia. In 2001, Ministers from East Asia and the Pacific, Europe and North America issued the Bali Declaration with pledges to fight forest crime by strengthening bilateral, regional and multilateral collaboration. The Bali Declaration broke the traditional reticence to discuss the problems of illegal logging and trade. The programme of regional and national activities represents an innovative, comprehensive and integrated effort to tackle illegal logging and trade practices. In 2002, a Regional Task Force and Advisory Group proceeded to analyse concrete ways to give operational meaning to the Declaration.

Other regional FLEG initiatives. Similar initiatives are now under way in Africa and are planned for Latin America, Europe and the Russian Federation. The Africa Forest Law Enforcement and Governance project aims at galvanizing key actors' commitment as well as enabling policy, legal and institutional conditions to foster better forest law compliance. A Ministerial Meeting took place in Yaoundé, Cameroon in 2003. A Ministerial Conference on Europe and North Asia Forest Law Enforcement and Governance is being planned by the Government of the Russian Federation for late 2005.

European Union FLEGT Initiative (www.europa.eu.int/comm/development)

In 2003, the European Commission issued the Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan. The Plan was approved by member countries later in the same year and represents one of the most comprehensive international initiatives to date aiming to exclude illegal timber from international markets. It focuses on establishing voluntary timber licensing systems which are designed to identify legality of production and rely on credible (probably independent) verification of legal behaviour at every stage of the chain of custody

of the timber. The EU will also support steps to restrict investments in activities that may induce illegalities and the use of illegally sourced forest funds to finance armed conflicts.

The Plan also recommends that all donors highlight the importance of community-based forest management, land tenure and access to forest resources. It exhorts EU member states to adopt policies to exclude illegally sourced wood from public procurement. The Commission plans to investigate ways to integrate combating illegal logging activities into the money laundering legislation.

The EU system will be built up through a series of bilateral agreements with major timber-producing and exporting partner countries. Its impact will depend on the ability of the Commission to establish partnership agreements with a substantial number of producing exporting countries and thus avoid the diversion of illegal timber exported through third countries. A benefit to exporting countries entering the licensing system is that it would give them an advantage in relation to public and private procurement policies, since any imports to the EU from those countries would by definition be legal. A draft regulation to implement the licensing scheme and empower EU customs agencies to prevent entry of unlicensed timber products in the European Union was published in July 2004 and is currently under discussion within the EU Council (Brack, 2005).

In March 2005, over 70 timber companies and their federations, such as the United Kingdom Timber Trade Federation, the Dutch Timber Trade Federation, B&Q and IKEA issued a joint statement calling on the Commission to develop legislation outlawing illegal timber. The Commission promised to look into all the arguments carefully while implying that technical and political factors make it impossible to solve the problem through legislation alone (FERN, 2005).

G8 Action Programme on Forests

The 1997 G8 Summit established an Action Programme on Forests to accelerate the implementation of the proposals for action of the Intergovernmental Panel on Forests (IPF). One of the Programme's five areas of action was the control of illegal logging including assessment of the nature and extent of international trade in illegally harvested timber and measures to improve market transparency.

Although the final report of the G8 Programme was issued in 2002, subsequent G8 meetings have shown continued commitment to addressing the issue of illegal logging and trade. The 2003 G8 Evian Declaration contains a statement committing G8 members to assist countries in the adoption of modern technologies, such as satellite imaging, to help combat illegal logging. The final statement from the G8 Environment and Development Ministerial Meeting, which took place in March 2005, also includes several action points related to illegal logging, including steps to halt the import of illegally logged timber and to encourage public timber procurement policies that favour legal timber. Ministers also requested an expert meeting in 2006 to review progress towards the commitments made, to share lessons on actions to tackle illegal logging, and to make findings available.

Ministerial Conference on the Protection of Forests in Europe (www.mcpfe.org)

The Ministerial Conference on the Protection of Forests in Europe (MCPFE) is a high-level political initiative involving 40 European countries and the European Community, launched in 1990 to promote sustainable forest management in Europe. The dialogue also involves as observers non-European countries, non-governmental and international organizations, forest owner's associations and the forest industry.

At its fourth meeting in 2003, the MCPFE issued the Vienna Living Forest Summit Declaration, which commits parties to 26 actions, including two focused on improving governance in the forest sector in Europe and beyond:

- to promote incentives for the protection and sustainable management of forests, and remove incentives with a negative impact on forests and their biodiversity;
- to take effective measures to promote good governance and forest law enforcement, and to combat illegal harvesting of forest products and related trade, and contribute to international efforts to this end.

Signatories agreed to develop a work programme for the implementation of the commitments of the Fourth Ministerial Conference.

Asia Forest Partnership (www.asiaforests.org) and the Congo Basin Forest Partnership (www.cbfp.org)

The run-up to the 2002 Word Summit on Sustainable Development saw the formation of two international partnerships bringing together national governments, international institutions and civil society groups. Their objectives included tackling illegal logging.

The Asia Forest Partnership (AFP) was launched by Japan and Indonesia and now includes 15 governments, the European Commission, eight international organizations and four non-governmental groups. Priorities of the partnership include the development of minimum legal standards, timber tracking, introduction of verification systems, promotion of measures by countries to eliminate export and import of illegally harvested timber, international cooperation and coordination on trade statistics, information exchange on illegal logging and illegal trade, research and awareness raising. One of the AFP initiatives is examining opportunities for cooperation between regional border control agencies. A study completed under the auspices of The Nature Conservancy has looked at existing laws in key trading countries in Asia and this will be further developed during 2005.

The Congo Basin Forest Partnership (CBFP) consists of 29 members including three international organizations and ten non-governmental groups. It aims to improve communication and coordination among its members to promote sustainable management of Congo Basin Forest ecosystems and wildlife, ensure good governance, and raise the living standards of the people in the region. One of the most recent joint CBFP initiatives was a workshop held in March 2004 to design a forest concession monitoring system to document the industry's logging

practices in the region, and highlight the companies that are making the most significant strides toward sustainability.

NATIONAL INITIATIVES

United States President's Initiative Against Illegal Logging (www.usaid.gov)

The 2003 Presidential Initiative aims to assist developing countries in combating illegal logging, illegal timber trade and corruption in the forest sector. It focuses on the Congo Basin, the Amazon Basin and Central America as well as South and Southeast Asia.

The initiative is based on four strategic actions:

- good governance and rationalization of legal regimes and enforcement of laws;
- community-based actions to foster community involvement in forest governance;
- technology transfer, integrated monitoring systems and in-country capacity building;
- good business practices, transparent markets and legal trade, including country capacity to implement CITES.

Actions include supporting the US Agency for International Development's Sustainable Forest Products Global Alliance, co-financing ITTO projects to provide training in CITES implementation and to improve timber trade data, assessing international timber markets to identify critical factors related to illegal logging, and examining domestic legal authorities to combat illegal logging.

United Kingdom's Forest Law Enforcement and Governance Programme (www.illegal-logging.info/dfid)

This three-year programme, launched in October 2002, aims at facilitating reforms by national, regional and international institutions to address the problem of illegal logging and international trade in illegally harvested timber. It focuses on improved forest governance in West and Central Africa as well as on the maintenance of the political momentum of the Africa Forest Law Enforcement and Governance (AFLEG) process through support of subregional meetings, civil society strengthening and private sector dialogue. Support to promote and implement Voluntary Partnership Agreements under the EU's FLEGT Action Plan will also strengthen opportunities to harness consumer market forces and eliminate illegally logged timber products from West and Central African countries' exports to the EU.

BILATERAL TIMBER TRADE AGREEMENTS

Bilateral agreements can be developed by trading partners as a market-based tool to curb illegal timber trade. Indonesia for instance now has bilateral agreements with some of its main wood and wood product buyers such as the United Kingdom, Norway, China, Japan and Korea. These involve a "memorandum of

understanding" committing the parties to work together to reduce, and eventually eliminate, illegal logging and international trade in illegally logged timber and wood products.

The Memorandum of Understanding between Indonesia and the United Kingdom, the most developed to date, stipulates that the Parties will work together on regulatory and policy reforms, including:

- Identification, by both governments, of any reform of forest and related legislation and action required to prevent harvesting, export, and trade in illegally logged timber and wood products.
- Support by both governments for the development, testing and implementation of systems for the verification of legal compliance based on independently verified chain of custody tracking and identification systems, to be applied in due course throughout Indonesia.
- The provision of technical and financial capacity building assistance by the United Kingdom to support the design and implementation of these systems of compliance verification and the necessary accompanying legal and administrative reforms.
- Support by both governments for the involvement of civil society in the effort to curb illegal logging and trade and particularly in monitoring the implementation of compliance verification.
- The joint development of systems for the timely collection and exchange of data on timber trade and wood products between the two governments.
- The joint development of effective collaboration between enforcement agencies and networks in the two countries, aiming to provide mutual assistance in the application of Indonesia law and United Kingdom law.
- Encouragement by both governments for action by industry to reduce and eventually eliminate the volume of illegal timber and wood products transported and sold, including sourcing only timber and wood products identified as legal through the compliance verification systems referred to above, or through other equally effective means of identification.

In order to guide the implementation of the Memorandum, a joint action plan was established, including a timetable for carrying out the commitments outlined above. It is worth noting that some countries have taken not bilateral but unilateral steps to prevent illegal wood from entering their markets. For instance, Malaysia has passed a law banning timber imports from Indonesia.

INTERNATIONAL ORGANIZATIONS AND PARTNERSHIPS

International agencies can assist governments in rationalizing their national forest policy and legislative framework and in providing capacity building for better law enforcement.

Collaborative Partnership on Forests (www.fao.org/forestry/cpf)

The Collaborative Partnership on Forests (CPF) is an interagency partnership of 14 major forest-related international organizations, institutions and convention

secretariats, which was established in April 2001 to enhance cooperation and coordination on forest issues. The main activities of partners in the area of forest law enforcement are described in the individual agency sections.

Food and Agriculture Organization of the United Nations (www.fao.org)

Illegal forest activities were prominently exposed in FAO's *State of the World's Forests 2001* report. Subsequently, the Organization has been carrying out various activities in support of countries' efforts to promote better forest sector governance. An expert meeting was organized in early 2002, with participation from various international organizations, NGOs, the private sector and research institutions to examine the range of policy reforms that could potentially improve law compliance in the forest sector. Projects to improve forest law enforcement are also supported in Mozambique, Honduras, Costa Rica and Nicaragua. FAO's Regional Forestry Commissions also serve as a forum for sharing information and promoting cooperation at the regional level on a wide range of issues, including forest governance and timber trade.

The statement of the 2005 Ministerial Meeting hosted by FAO includes a commitment to improve domestic forest law enforcement and governance and, to this end, promote international cooperation to support international trade in timber and forest products from legally harvested and sustainably managed forests. The 2005 FAO Committee on Forestry requested that FAO assist countries to enhance forest law enforcement.

The FAO-hosted National Forest Programme Facility contributes to policy reform in member countries by strengthening their knowledge basis and facilitating its dissemination to the public, decision-makers and other interested parties, thus increasing awareness and facilitating policy and legal reforms. The Facility can integrate considerations about illegal activities in its programmes of action.

International Tropical Timber Organization (www.itto.or.jp)

ITTO has a membership of 59 countries representing 80 percent of the world's tropical forests and accounting for 95 percent of the global trade in tropical timber. ITTO acts as a forum for debates on forest trade and sustainable forest management and also funds projects, some of which focus on forest governance and illegal trade. In November 2001, the International Tropical Timber Council (ITTC) adopted a decision on "forest law enforcement in the context of sustainable timber production and trade". In-depth country case studies on forest law enforcement were commissioned, (some of which were used in preparing this paper) and member countries were encouraged to submit project proposals dealing with law enforcement. ITTO also helps member countries to design frameworks for law enforcement in the forest sector. ITTO is supporting the implementation of phased approaches to certification in tropical timber producing countries. An important step in these phased approaches is the verification of the legality of wood.

Programme on Forests (www.profor.info)

PROFOR, a World Bank-hosted multidonor initiative established in 1997 to implement some of the recommendations of the Intergovernmental Panel on Forests, aims at enhancing the contribution of forests to poverty reduction, sustainable development and protection of environmental services. Forest governance – and within it, forest policy and law enforcement – is on PROFOR's agenda.

United Nations Forum on Forests (www.un.org/esa/forests)

The UNFF was established in 2000 to promote the implementation of IPF/IFF proposals for action. In 2003, the fourth session of the Forum discussed illegal logging and associated trade. The resolution of the Forum exhorted countries to improve law enforcement in the forest sector and control illegal trade of forest products. It also requested the support of the international community to provide the resources needed to improve law enforcement.

World Bank (www.worldbank.org)

The World Bank Forest Strategy includes improving forest sector governance and the control of illegal activities and corruption among its priority areas of support. As coordinating agency, the World Bank has taken a leading role in the organization of the regional FLEG initiatives in Asia and Africa discussed above. The Bank also contributes to fighting illegal activities in the forestry sector of various countries.

World Bank/WWF Alliance (www.forest-alliance.org)

The World Bank/WWF Alliance for Forest Conservation and Sustainable Use is a global partnership including governments, the private sector, and civil society. The Alliance's focus is on conservation and sustainable management of forest protected areas and forest certification. The Alliance is helping the Government of Indonesia to develop a strategy for fighting illegal logging in accordance with the recommendations and agreements under the FLEG initiative.

CONCLUSION

Mechanisms aiming at regulating international wood and wood product trade are important but they are only one of many tools which can be used to fight illegal logging and trade. In addition to the operational problems mentioned above, only a small proportion of production is traded internationally and domestic markets do not generally attach great importance to legality. It is therefore of utmost importance to also focus on fostering better governance and law compliance in the forest sector at the national and local levels.

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